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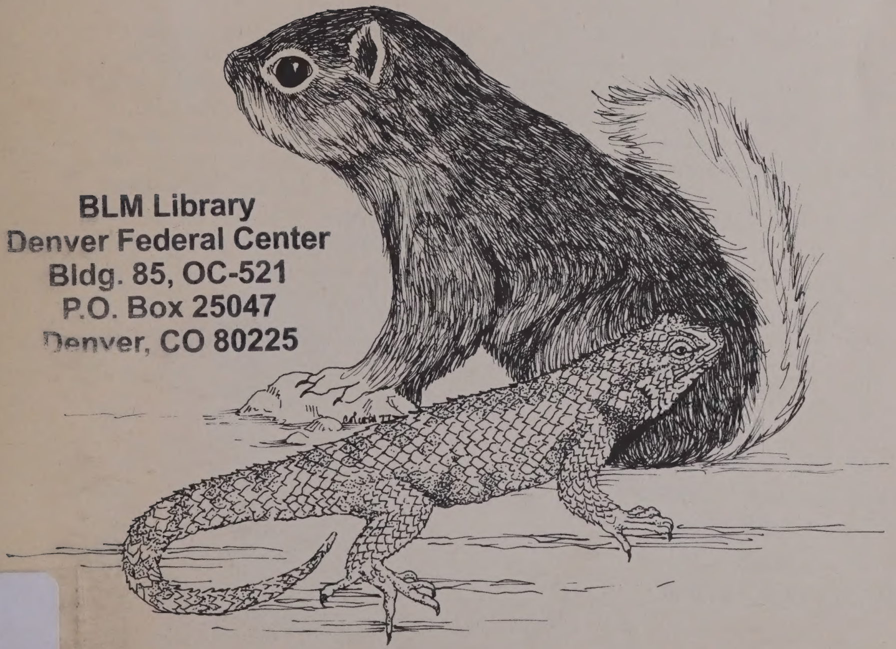
U.S. DEPARTMENT OF THE INTERIOR – BUREAU OF LAND MANAGEMENT

Distribution of Mammals, Reptiles, and Amphibians by BLM Physiographic Regions and A.W. Küchler's Associations for the Eleven Western States

by

STEPHEN R. BERNARD
KENNETH F. BROWN



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INTRODUCTION

The material for this technical note was obtained from reviewing many of the existing publications on mammals, reptiles and amphibians of the territorial western continental United States. It is intended to be used with the Integrated Habitat Analysis System and Strategic Information System within the Bureau of Land Management.

The Physiographic Regions are based on the climate and landform delineations overlayed on A. W. Kuchler's 1975 map of the "Potential Natural Vegetation of the Conterminous United States." The reference to the Association number are the numbers for the 1975 map by A. W. Kuchler mentioned above and enclosed in the jacket on the back cover. Reproduction permission has been granted by A. W. Kuchler and the American Geographical Society, Broadway at 156 Street, New York, New York 10032.

The purpose of this technical note is to consolidate in one volume a species and subspecies list of mammals, amphibians and reptiles to be used for a variety of reports needed by various agencies. This technical note is not to be considered a final document, but it is hoped to stimulate refinement, additions and further investigation into more specific habitat requirements and occurrence within habitat sites of individual species and/or subspecies. Comments or additions will be welcomed by the authors.

Finally, we wish to thank the many persons who have assisted in preparing this technical note, Dr. James R. Dixon, Department of Wildlife and Fisheries, Texas A & M University and especially Diane Colcord who illustrated the cover. The typing was undertaken by many secretaries, especially, Aba Masengale, Carla Wacker, Dianne Ticer, Virginia Motoyama, Melva Mitchell and all those who had assisted us in preparing, reviewing and gently persuading us in this undertaking. We also wish to thank all the Staff of the Division of Standards and Technology and especially the Wildlife Staff for their help.

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KEYS

PHYSIOGRAPHIC REGIONS:

1. Northern Pacific Border
2. Cascade Mountains
3. Southern Pacific Border
4. Sierra Mountains
5. Columbia Plateau
6. Upper Basin and Range
7. Lower Basin and Range
8. Northern Rocky Mountains
9. Middle Rocky Mountains
10. Wyoming Basin
11. Southern Rocky Mountains
12. Colorado Plateau
13. Rocky Mountain Piedmont
14. Great Plains
15. Black Hills Uplift
16. Upper Missouri Basin and Broken Lands

STATES:

Arizona	AZ
California	CA
Colorado	CO
Idaho	ID
Montana	MT
Nevada	NV
New Mexico	NM
Oregon	OR
Utah	UT
Washington	WA
Wyoming	WY

ASSOCIATION NUMBERS:

From the map of the Potential Natural Vegetation of the Conterminous United States, by A. W. Kuchler, second edition, 1975.

DIRECTIONAL LOCALITIES:

North	N
South	S
East	E
West	W
Central	C

* An asterisk indicates a subspecies.

For standardization purposes, changes in nomenclature were done according to the following authorities:

For mammals:

Jones, J. K. Jr., D. C. Carter, and H. H. Genoways. 1975. "Revised checklist of North American Mammals North of Mexico," Occational Papers, No. 28, 14pp, Texas Tech Univ.

Eutamias cinereicollis canipes is now *Eutamias canipes* (Gray-footed Chipmunk).
Myotis subulatus is now *Myotis leibii* (Small-footed Myotis).
Tadarida molossa is now *Tadarida macrotis* (Big-freetail Bat).
Perognathus merriami is now synonymous with *Perognathus flavus* (Silky Pocket Mouse) (see also Wilson, D. E. 1973. The systematic status of *Perognathus merriami* Allen. Proc. Biol. Soc. Washington, 86: 175-191.)
Idionycteris is a genus distinct from *Plecotus* (Big-eared Bat) (see also Williams, D. F., J. D. Druecker, and H. L. Black. 1970. The karyotype of *Euderma maculatum* and comments on the evolution of the plecotine bats. J. Mamm. 51: 602-606.)
Nasua narica is now *Nasua nasua* (Coati).
Vulpes fulva is now *Vulpes vulpes* (Red Fox).
Lynx lynx and *Lynx rufus* are now *Felis lynx* and *Felis rufus,* respectively (Lynx and Bobcat).
Cratogeomys castanops is now *Pappogeomys castanops* (Yellow-faced Pocket Gopher).
Gulo luscus is now *Gulo gulo luscus* (Wolvarine).
Myotis occultus is not recognized.
Dasyterus ega is now *Lasiurus ega* (Southern Yellow Bat).
Lepus mexicanus is now *Lepus callotis* (White-sided Jackrabbit).
Eutamias townsendii ochrogenys (Townsend's Chipmunk) is now *Eutamias ochrogenys* (Yellow-cheeked Chipmunk).
Eutamias townsendii senex is now *Eutamias senex* (Allen's Chipmunk).
Eutamias townsendii siskiyou is now *Eutamias siskiyou* (Siskiyou Chipmunk).
Thomomys monticola mazama (Mountain Pocket Gopher) is now *Thomomys mazama* (Western Pocket Gopher).
Thomomys talpoides idahoensis (Northern Pocket Gopher) is now *Thomomys idahoensis* (Idaho Pocket Gopher).
Thomomys umbrinus bottae (Southern Pocket Gopher) is now *Thomomys bottae* (Botta's Pocket Gopher).
Sigmodon hispidus arizonae (Hispid Cotton Rat) is now *Sigmodon arizonae* (Arizona Cotton Rat).
Microtus richardsoni is now *Arvicola richardsoni* (Water Vole).
Cervus canadensis is now *Cervus elaphus* (Elk).
Dama hemoinus is now *Odocoileus hemoinus* (Mule Deer).
Dama virginiana is now *Odocoileus virginiana* (White-tailed Deer).

For amphibians and reptiles:

Dixon, J. R. 1977, Personal communications, Texas A & M University.

Rana pretoisa and *Rana pipiens* have no current subspecies.
Pseudemys is now *Chrysemys* (Family Emydidae).
Holbrookia texana is now *Cophasaurus texana* (Greater Earless Lizard).

Crotaphytus wislizenii is now *Gambelia wislizenii* (Leopard Lizard) (see also Herpetologica, 1975, Vol. 1, No. 3, pp. 336-347.).
Ficimia cana is now *Gyalopion canum* (Western Hook-nosed Snake).
Ficimia quadrangularis is now *Gyalopion quadrangularis* (Desert Hook-nosed Snake).
Trimorphodon species are now all under *Trimorphodon biscutatus* (Lyre Snake) (see also Herpetologica, 1971, Vol. 27, No. 2, pp. 200-211.).
Xantusia riversiana is now *Klauberina riversiana* (Island Night Lizard).

Rossman, D. A., and W. G. Eberle, 1977. Partition of the genus *Natrix*, with preliminary observations on evolutionary trends in natricine snakes. Herpetologica 33: 34-43.

The genus *Natrix*, of North America, is now the genus *Nerodia*.

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Class MAMMALIA
Order MARSUPIALIA - Opossum

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC ASSOCIATION		STATES	COMMENTS
		REGIONS	NUMBERS		
Family DIDELPHIDAE - New World Opossums					
OPOSSUM *Didelphis virginiana* (Divi)	Prefers low elevations; deciduous riparian woodland, farm areas. Rapidly expanding range. Nest: hollow trees, brush piles, culverts, used dens. Diet: nuts, vegetables, fruits, insects, small animals Damages crops. Nocturnal. Home range 15-40 acres. Gestation: About 13 days. In pouch about 2 mos. 1-2 litters/yr. Found in grassland, desert, piñon-juniper land; in riparian communities along major rivers (e. CO); possibly in cottonwood forests (Rio Grande Valley, NM).	1-5 7 10-14	1 18 23 28 30 31 33 40 53 58 65 69	AZ CA E.CO ID NM OR WA WY	

Class MAMMALIA
Order EDENTADA

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC ASSOCIATION REGIONS	PHYSIOGRAPHIC ASSOCIATION NUMBERS	STATES	COMMENTS
Family DASYPODIDAE - Armadillos					
NINE-BANDED ARMADILLO *Dasypus novemcinctus* (Dano)	No specimens actually collected (NM), but sightings recorded. May occupy a range in the desert area of Pecos Valley, NM Digs burrows, which are also used by other animals.	13	59 65	NM (SE)	Rare
**D. n. mexicanus* (Danome)					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC ASSOCIATION REGIONS	NUMBERS	STATES	COMMENTS
Family SORICIDAE - Shrews					
MASKED SHREW *Sorex cinereus* (Soci)	Prefers montane habitats; wet meadows and moist willow thickets; also in moist situations in forest, brushland, and open country. Nest: constructed of grasses of dry leaves; located usually under stumps, logs, brush piles. Birth: April through October. Diet: insects, small animals, large consumer. Active day or night. Breeding: probably March-April 1+ litter/yr.	1 2 5 8-16	1 3 12 13 52 55 63 64 65 66	CO ID MT NM UT WA WA	
*S. c. cinereus (Socici) *S. c. haydeni (Sociha) *S. c. streatori (Socist)				MT WY WA	
MERRIAM'S SHREW *Sorex merriami* (Some)	Prefers arid regions; mostly in bunchgrass, sagebrush, and open woodland, usually of white fir-douglas fir-ponderosa pine zone (NM). Diet: insects, small animals.	5-12 16	18 23 38 55 64	All	
*S. m. leucogenys (Somele) *S. m. merriami (Someme)				South North	
VAGRANT SHREW (Wandering Shrew) *Sorex vagrans* (Sova)	Prefers moist streamsides, marshes, and bogs, but not restricted; from ponderosa pine zone through the higher vegetative zones. May be in moist humus, near water, or far from water. Nest: constructed of grass, dry leaves; in stumps or logs. Omnivorous.	1 2 5-13 16	1 – 13 15 18 – 23 28 29	All	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	Diet: vegetable matter, insects, earthworms, slugs, sow bugs, or spiders. Active day or night. Breeding: February-May and October-November.				
*Fifteen western subspecies.					
*YAQUINA SHREW *Sorex v. yaquinae*	Prefers alder-salmonberry habitat; near streams. Nocturnal. (Sovaya)	1	1 28	OR (W)	
DUSKY SHREW *Sorex obscurus* (Soob)	Mesic habitats (CO), coniferous forests, rain-forest thickets, marshes, heather, dry hillsides. Nest: located in stumps, logs, debris. Active day and night. Birth: Probably July	1 2 4 5 7-13 16	2 3 5 24	CA CO ID MT NV (W) NM OR UT WA WY	
MOUNT LYELL SHREW *Sorex lyelli* (Soly)	Small area in the high Sierra Nevada. In grass or under streamside willows.	4	7 8 52	CA	Rare
MALHEUR SHREW (Prebles's Shrew) *Sorex preblei* (Sopr)	Probably in marshes, bogs, or near streams; along willow-fringed creeks. Diet: primarily insects	5 8	12 14 15 55	ID (W) OR (E)	
TROWBRIDGE'S SHREW *Sorex trowbridgii* (Sotr)	In Ponderosa pine forests; frequently in dry Redwood and Douglas fir forests; in forest floor litter, meadows, and woodland canyons. Also in chaparral. Diet: includes Douglas fir seeds, insects, isopods, and other invertebrates. Birth: March-May, occasionally July.	1-5	2 3 5 6 7 10 29 33	CA OR (W) WA (W) NV (W)	
*Five subspecies.					
PACIFIC SHREW *Sorex pacificus* (Sopac)	Humid coastal region; under decaying logs; in the spruce and redwood forests, marshes and swamps.	1-3	1 5 6	CA (W) OR (N.W.)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
PACIFIC WATER SHREW (Marsh Shrew) *Sorex bendirri* (Sobe)	On or near humid coastal region; prefers skunk cabbage marsh, swamps, damp woods, damp ravines; near small, sluggish streams; can be found under logs. Diet: Aquatic insects, terrestrial snails, spiders, other invertebrates. Active day and night. Aquatic.	1 2	1 2 3 5 6 11 28	CA OR WA	
**S. b. albiventer* (Sobeal)				WA	
**S. b. bendirii* (Sobebe)				CA OR WA	
**S. b. palmeri* (Sobepa)				OR	
PYGMY SHREW *Microsorex hoyi* (Miho)	Moist meadows, forest-meadow borders, coniferous forest, some dry open areas; avoids excessively wet conditions; found under rotting logs. Diet: insects, small rodents. Active day and night.	8 11	11 12 13 18 55	CO ID(N) MT WA(NE)	
**M. h. washingtoni* (Mihowa)					
SHORT-TAILED SHREW *Blarina brevicauda* (Blbr)	Occasional in Yuma County, CO; not restricted; forests, brushy areas, grasslands, marshes. Nest: dry leaves, grass, hair; 6-8" diameter; constructed under logs, stumps, rocks, debris. Diet: insects, snails, worms; has poisonous saliva. Active day and night, all year. Breeding: March-May and August-September. Gestation 21+ days	13 14	65 70	CO (N.E.)	
SOUTHERN SHORT-TAILED SHREW *Blarina carolinensis* (Blca)		13 14	65 70	CO (N.E.)	
LEAST SHREW *Cryptotis parva* (Crpa)	Yuma County, CO; open, grassy areas, possibly w/scattered brush; marshes. Nest: underground, under debris, in beehives. Diet: insects, small snimals. Active day and night. Breeding: North, March-November, also February in South.	13 14	65 70	CO (N.E.)	
**C. p. parva* (Crpapa)					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
DESERT SHREW (Gray Shrew) *Notiosorex crawfordi* (Nocr)	Arid and semi-arid Sagebrush Scrub and Coastal Sage Scrub; also riparian woodland, grassland, chaparral slopes, dry alluvial fans; highest found above a talus slope in a canyon w/postclimax ponderosa stand (NM).	3 7 11-13	23 31 35 38 41 42 53	AZ CA(S) CO(S) NV(S) NM)	Rare (CA NM)
**N. c. crawfordi* (Nocrcr)					
ORNATE SHREW *Sorex ornatus* (Soor)	In the Valley grassland, foothill woodland, and Ponderosa pine forest, near streams, in marshes, on brush-covered hillsides. Active day or night. Usually in damp earth.	1 3 4	5 30 48 49	CA (W)	
*Five western subspecies.					
INYO SHREW *Sorex tenellus* (Sote)	Near water; on rock ledges and under boulders and logs in canyon bottoms, preferring shaded sagebrush scrub areas.	6 7	38 40 41	CA (E) AZ (SW)	Rare
SANTA CATALINA SHREW *Sorex willeti* (Sowi)	Santa Catalina Island.	3	33 35	CA (W)	
ASHLAND SHREW *Sorex trigonirostris* (Sotri)	In Ashland, on north base of Siskiyou Mountains May be a race of *Sorex ornatus*.	1 4	2 26	OR	
DWARF SHREW *Sorex nanus* (Sona)	Prefers White fir, Douglas fir zone; also frequents alpine and subalpine rockslide areas.	7 9-13 16	12 18 52	AZ CO NM WY UT	Rare (WY)
SUISAN SHREW *Sorex sinuosus* (Sosi)	Grizzly Island, near Suisan, Solano County, California In tidal marsh area.	3	49	CA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
WATER SHREW (Northern Water Shrew) *Sorex palustris* (Sopa)	Common along small, cold streams and lakes, with bank cover; may be in spruce-fir forests, ranging down through open pine woodlands with suitable microhabitats. Adapted for swimming. Nest: fine vegetation, hair; constructed beneath Agave boards or debris. Birth: probably August.	1 2 4-6 8-12 16	2-5 7 8 11 12 14 15 18 20 21	All	
S. p. navigator (Sopana)					
Family TALPIDAE - Moles					
SHREW-MOLE *Neürotrichus gibbsii* (Negi)	Humid areas in shady ravines; usually near streams in Redwood, Douglas fir, and Ponderosa pine forests; in meadows with well-drained soil in alder-salmonberry habitat. Nest: in rotting stumps or logs, humus of forest floor. Diet: earthworms, isopods, insects, some vegetable matter. Active day and night. Birth: February-November.	1-4	1-6 10	CA OR WA	
**N. g. gibbsii* (Negigi)				WA	
**N. g. hyacinthinus* (Negihy)				CA	
**N. g. minor* (Negimi)				CA OR WA	
TOWNSEND'S MOLE *Scapanus townsendii* (Scto)	Meadows and pastures, on sandy loam w/good vegetative cover, in Redwood, Douglas fir, and Ponderosa pine forests. Nest: in deep tunnel; used by successive generations. Diet: insects, earthworms, arthropods, annelids, some vegetable matter. Predominately nocturnal. Birth: March. Gestation probably 4 weeks.	1 2	2 3 5 6	CA OR WA	
COAST MOLE (Pacific Mole) *Scapanus orarius* (Scor)	Chiefly in deciduous forests - Redwood, Douglas Fir, Ponderosa pine, spruce, and hemlock; also in meadows and pastureland. Diet: insects, arthropods, annelids. Active day and night; rarely above surface. Birth: March-April.	1 2 5 8	1-4 6 10 11 12 14 15	CA ID(W) OR WA	
**S. o. orarius* (Scoror)				CA OR WA	
**S. o. schefferi*(Scorsc				ID OR WA	
**S. o. yakimensis* (Scorya)				WA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
BROAD-FOOTED MOLE (California Mole) *Scapanus latimanus* (Scla) *Eleven subspecies.	Moist soil in valleys, mountain meadows. Diet: insects, earthworms (heavy eater); requires water. Rarely above surface. Birth: March-April.	3-7	5 7 8 10 26 29 30	CA OR NV (W)	
EASTERN MOLE *Scalopus aquaticus* (Scaq) *One subspecies in west. *S. a. caryi* (Scaqca)	Restricted to moist, friable soils; in river valleys, floodfields, meadows, sandhills, lawns, and gardens. Nest: grass-lined; in burrow 18 to 24" underground. Diet: insects, worms, vegetable matter. Active day and night, all year; in burrow most of time. Birth: March in South, May in North. Gestation about 6 weeks.	13 14	65 67 69	CO(NE) WY	

Class MAMMALIA
Order CHIROPTERA

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC ASSOCIATION REGIONS	PHYSIOGRAPHIC ASSOCIATION NUMBERS	STATES	COMMENTS
Family MORMOOPIDAE - Ghost-faced Bats					
GHOST FACED BAT (Leaf-chinned Bat) *Mormoops megalophylla* (Mome) **M. m. megalophylla* (Momeme)	Santa Cruz County, AZ; usually in hot tunnels or caverns; rarely in buildings. Diet: insects. Colonial. Birth: June-July.	7	31 58	AZ	Rare
Family PHYLLOSTOMIDAE - Leaf-nosed Bats					
LEAF-NOSED BAT *Macrotus californicus* (Macal)	Riverside County; perhaps L. A. County; in hottest areas; Roost in caves or old mine tunnels during day. A late flyer. Seperation of sexes. Birth: May-July.	3 7	35 41 42 43	AZ CA(S) NV (S)	
LONG-TONGUED BAT (Hog-nosed Bat) *Choeronycteris mexicana* (Chme)	Found in well-lighted sections of caves or old mine tunnels; Ocotillo, Yucca, Agave, Manzanita, Evergreen Oak; Juniper in area; also included Piñon and Sycamore in hilly country (NM). In Cochise County, Arizona and San Diego, CA in October and December, respectively. Diet: pollen, nectar. Birth: June-July.	3 7	23 31 42 43 44	AZ(S) CA(S) NM(SW)	
MEXICAN LONG NOSED BAT *Leptonycteris nivalis* (Leni) **L. n. nivalis* (Lenini)	Common locally in moist caves, old mine tunnels, or buildings. Diet: pollen, nectar, some insects. Birth: April-June.	7	31 42 58	AZ(S) NM(SW)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
SANBORN'S LONG-NOSED BAT *Leptonycteris sanborni* (Lesa)	Seems to have 5,600 feet upper limit. In area from mid-July to October. Lactating female captured August 11.	7	31 58	NM(SW)	
Family VESPERTILIONIDAE - Vespertilionid Bats					
LITTLE BROWN MYOTIS *Myotis lucifugus* (Mylu)	Commonest in forested areas; also along edge of ponderosa pine or white spruce forests or in grassy meadows; usually near large permanent water sources. Roosts in cave entrances, mine tunnels, hollow trees, sometimes in buildings. Diet: insects. Colonial. Active dusk to dawn. Flight is erratic. May hibernate or migrate in winter. Birth: May-July. Gestation: about 80 days.	All	5 10 11 15 18 20	All	Common
**M. l. alascensis* (Mylual)				CA ID MI OR WA	
**M. l. carissima* (Myluca)				All	
**M. l. lucifugus* (Mylulu)				CO	
**M. l. phasma* (Myluph)				CA NV UT	
YUMA MYOTIS *Myotis yumanensis* (Myyu)	Chiefly subboreal zones, in semi-arid to arid situations; in desert, grassland, canyons, open woods, riparian communities; near water cources. Roosts in caves, unoccupied buildings. Colonial. Late flyer. Probably migratory. Birth: May-June	1-13 16	10 23 30 40 48 55 64	All	
**M. y. oxalis* (Myyuox)				CA	
**M. y. saturatus* (Myyusa)				CA OR WA	
**M. y. sociabilis* (Myyuso)				CA ID MT OR WA WY	
**M. y. yumanensis* (Myyuyu)				AZ CA NM NV UT	
CAVE MYOTIS *Myotis velifer* (Myve)	Chiefly in desert, grassland, near water courses. Roosts primarily in caves; seeks crevices or vertical cliffs. Colonial. Sexes probably segregate in summer. Some probably hibernate (NM(SW)). Birth: June-July	7 9 11 13	40 42 43 53 58 59 65	AZ CA(SW) CO ID (SE) NM	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
**M. v. brevis* (Myvebr)				AZ CA	
**M. v. incautus* (Myvein)				NM UT	
**M. v. velifer* (Myveve)				AZ NM	
KEEN'S MYOTIS *Myotis keenii* (Myke)	May be as high as ponderosa pine and white spruce areas; roosts in caves, hollow trees, mine tunnels, buildings. Probably small colonies. May hibernate in northern areas. Birth: late June-July. Probably conspecific with *Myotis evotis*.	1 7 13 14 15	2 17 64 66	AZ NV OR(NW) WA WY(E)	
**M. k. keenii* (Mykeke)				WA	
**M. k. septentrionalis* (Mykese)				MT WY	
LONG-EARED MYOTIS *Myotis evotis* (Myev)	In coniferous woodlands, some in spruce and fir zone (NM); in semi-arid shrublands (CO), roosts in mine tunnels, hollow trees, abandoned buildings. No large colonies. Late flyer. Migratory. Birth: late June-July	1-13 16	5 18-21 29	All	Uncommon (MT, AZ)
**M. e. evotis* (Myevev)				All	
**M. e. pacificus* (Myevpa)				CA OR WA ID MT	
FRINGE-TAILED MYOTIS *Myotis thysanodes* (Myth)	Seems to prefer open coniferous woodlands, desert-scrub situations, and grassy meadows; near streams or ponds. Roosts in crevices, caves, mine tunnels, and buildings. Colonial. Sexes separate in summer. An agile flyer. Birth: June-July	1-13	1 2 18 23 29 51 59 70	All	Uncommon (CO, OR)
**M. t. thysanodes* (Mythth)					
LONG-LEGGED MYOTIS (Hairy-winged Myotis) *Myotis volans* (Myvo)	In open coniferous forest, grassland, meadows and campgrounds; near water courses. Roosts in trees, crevices, and buildings. Colonial. Migration movements uncertain. Birth: June-July (NM)	All	2 5 16 17 18 30 31 48 50 51	All	
**M. v. interior* (Myvoin)				All	
**M. v. longicrus* (Myvolo)				CA ID MT OR WA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
CALIFORNIA MYOTIS *Myotis californicus* (Myca)	Common in grassland and desert (NM), and up through the ponderosa pine zone. Roosts in mine tunnels, loose rocks, hollow trees, buildings and under bridges. Solitary or small colonies. Flight highly erratic. Birth: late June or July.	1-14	2 18 19 23 28 29 30 31 32 48 51 55 58 59	AZ CA CO ID MT NV NM OR UT WA	
**M. c. californicus* (Mycaca)				CA ID OR UT WA	
**M. c. caurinus* (Mycacau)				CA	
**M. c. stephensi* (Mycast)				AZ CA NV UT	
SMALL-FOOTED MYOTIS (Masked, or Least Bat) *Myotis leibii* (Myle)	Most common in ponderosa pine zone, but also in desert and higher in the spruce-fir zone; usually near water. Roosts primarily in caves or rock crevices in forested area; also in mine tunnels, or buildings. Solitary, sometimes colonial. Flight is low, early evening. Hibernates in caves. Birth: May-July	2-16	11 15 16 18 20 23 30 31 35 48	All	
SOUTHWESTERN MYOTIS *Myotis auriculus* (Myau)	Most common in ponderosa pine zone; also on edge of Douglas fir, white fir zone; near water. In NM between early May and early September Birth: probably June.	7-12	18 19 31 58	NM (SW) AZ (S)	
SILVER-HAIRED BAT *Lasionycteris noctivagans* (Lano)	Seems to prefer to forage in grassy valleys surrounded by hillsides with ponderosa pine stands; near a source of standing water. Roosts in tree foliage, rarely in caves. Gregarious; males may be solitary seasonally. Birth: June-July. Slow, erratic flight. Migration probable	All	5 9 11 19 22	All	
WESTERN PIPISTREL *Pipistrellus hesperus* (Pihe)	In arid conditions near water; most common in desert and grassland; also in piñon-juniper woodland w/scattered sage brush, and rare in ponderosa pine zone. Roosts in caves, cliffs, under loose rocks, and occasionally in buildings. Crepuscular. Erratic flight. Carnivorous. Birth: June-July	3 5-4	23 31 38 42 43 48	AZ CA CO ID NV NM	

*Five western subspecies.

CHIROPTERA: VESPERTILIONIDAE 12

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
BIG BROWN BAT _Eptesicus fuscus_ (Epfu)	Common over grassy meadows surrounded by ponderosa pine start; also in piñon-juniper; near ponds or water courses. Roosts in caves, mine tunnels, crevices, hollow trees or buildings. Solitary or small colonies. Carnivorous. Some migrate. Early flyers. Birth: May-July	All	5 11 23	All	Common
*_E. f. bernardinus_ (Epfube)				CA NV OR WA	
*_E. f. pallidus_ (Epfupa)				Interior States	
HOARY BAT _Lasiurus cinereus_ (Laci)	Prefers wooded areas; tends to avoid caverns and buildings. Roosts in tree foliage. Diet: primarily moths. Solitary. Late, strong flyer. Winters along coast, some migration inland summer. Birth: June	All	9 30	All	Uncommon (A)
*_L. c. cinereus_ (Lacici)					
RED BAT _Lasiurus borealis_ (Labo)	Roosts mostly in trees or shrubs near or on the ground. Begins flying early evening, hunting along watercourses or among trees. Birth: May-June.	1 2 3 4 6 7 13 14 16	18 23 30 31 32 65 66	AZ CA CO(E) NV NM(SW) MT(NE) OR(W) UT WA(W) WY(E)	
*_L. b. borealis_ (Labobo)				CO MT WY	
*_L. b. teliotis_ (Labote)				CA OR WA	
SOUTHERN YELLOW BAT _Lasiurus ega_ (Laeg)	In the Colorado desert: Some netted over a stream, beneath sycamores and cottonwoods (NM); in wooded areas Probably solitary or in small colonies.	3 7	5 31 58	AZ(S) NM(S) CA (S)	Rare
*_L. e. xanthinus_ (Laegxa)					
SPOTTED BAT _Euderma maculatum_ (Euma)	Captured in piñon-juniper woodland near sandstone cliffs, and over streams and water holes in ponderosa or mixed coniferous forest w/rock cliffs nearby (NM); arid country. Caves, occasionally buildings. Probably hibernate in caves.	3-7 8-12	5 16 23 58	AZ CA ID MT NV NM UT WY	Extremely rare

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
TOWNSEND'S BIG-EARED BAT (Western Big-eared Bat, Lump-nosed Bat) *Plecotus townsendii* (Plto)	Ranges from low, arid desert situations to fir-spruce zone conditions. Roosts in caves, rock shelters, or mine tunnels. Winters regularly in caves and mine shafts. Solitary in summer; colonial in nurseries and during hibernation. Fly high at dusk. Birth: April-July	1-15	2 12 15 17 22 23 29 40 41 58	All	
ALLEN'S BIG-EARED BAT (Mexican Big-eared Bat) *Idionycteris phyllotis* (Idph)	Common in ponderosa pine-oak forests, also in riparian forest of sycamores, cottonwoods, and walnuts. Roosts in caves. Flies late. Strong flyer. Birth: June-July	7	19 31 32	AZ(S) NM (SW)	Rare
PALLID BAT *Antrozous pallidus* (Anpa)	Most common in deserts, grasslands, semiarid canyonlands, broken, rocky areas, and occasionally in ponderosa forest. Roosts in caves, rock fissures, mine tunnels, trees, and buildings. Small colonies, slow flight, near the ground. Diet: includes Jerusalem crickets Birth: April-June	1-13	10 11 23 32 33 40 41 42 48 50 51 55	AZ CA CO ID(SW) NV NM OR UT WA	
**A. p. cantwelli* (Anpaca)				NV OR WA	
**A. p. pacificus* (Anpapac)				CA OR	
**A. p. pallidus* (Anpapal)				AZ CA CO NM NV UT	
Family MOLOSSIDAE - Freetail Bats					
BRAZILIAN FREE-TAILED BAT (Mexican Free-tailed Bat, Guano Bat) *Tadarida braziliensis* (Tabr) **T. h. mexicana* (Tabame)	Common in desert, desert grassland, and piñon-juniper woodland. Roosts in caves and buildings. Carnivorous. A voracious feeder, primarily on moths. Large colonies (e.g. Carlsbad Caverns NM) Migratory. Strong flyers. Birth: late June	3-7 9-13	23 38 40 58 59	AZ CA CO NV NM OR UT	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
POCKETED FREE-TAILED BAT *Tadarida femorosacca* (Tafe)	In Colorado Desert. Roosts in caves and rock crevices.	3 7	31 41 42 43 58	AZ(S) CA(S) NM(S)	Rare
BIG FREE-TAILED BAT *Tadarida macrotis* *(Tadarida molossa)* (Tama)	Common in piñon-juniper woodland, desert grassland, and desert. Roosts in rock crevices, caves, under slabs of lava and in buildings. Not highly colonial. Strong flyers, Fly at dusk. Birth: May-early June	3 5-13	23 33 38 40 58	AZ CA CO ID(SW)	Rare
WESTERN MASTIFF BAT (Greater Mastiff Bat) *Eumops perotis* (Eupe) **E. p. californicus* (Eupeca)	Arid and semiarid low lands. Roosts in rock crevices, tunnels, trees, and buildings. May be colonial or solitary. Carnivorous. Flies late dusk. Rarely seen in flight. Birth: May-July	3 7	35 42 43 44	AZ CA NM	Uncommon (CA)
UNDERWOOD'S MASTIFF BAT *Eumops underwoodi* (Euun) **E. u. sonoriensis* (Euunso)	Sighted only in Pima County, Arizona. Flies late; fairly straight flyer. Birth: Probably July	7	31 58	AZ(S)	Rare

Class MAMMALIA
Order LAGOMORPHA

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC ASSOCIATION		STATES	COMMENTS
		REGIONS	NUMBERS		
Family OCHOTONIDAE - Pikas					
PIKA (Cony) *Ochotona princeps* (Ocpr)	Prefers high altitudes. Confined to boulder fields, talus slides, and rock slides. Perches on boulders. Diet: grasses and herbs; stores food. Largely diurnal. Colonial. Territorial. Does not hibernate. Breeding: Spring-early summer Birth: May-June and July-August. Gestation 30-31 days.	2 4-6 8-13	3 4 5 7 8 11-15 52	CA CO ID MT NV NM OR UT WA	
*Thirty one western subspecies.					
Family LEPORIDAE - Hares and Rabbits					
PYGMY RABBIT *Sylvilagus idahoensis* (Syid)	Dense rabbitbrush and sagebrush in desert and semi-desert. Burrow: simple, beneath large dense sagebrush. Primarily nocturnal. Home range within 30 yards of burrow. Birth: June-July	5 6 8	38 40 55	CA ID MT NV OR UT WA	
BRUSH RABBIT *Sylvilagus bachmani* (Syba)	West of the crests of the Sierra Nevada and the Cascades; chaparral or thick brush. Makes runways through thick vegetation. Active primarily late afternoon to morning. Home range: 1/2 - 1 acre. Breeding: January-June	1-4	33 35	CA OR	
*Eight western subspecies					

LAGOMORPHA: OCHOTONIDAE, LEPORIDAE 16

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
EASTERN COTTONTAIL *Sylvilagus floridanus* (Syfl)	Forested areas; especially ponderosa zone and higher, with riparian and open situations; common in forest edges, brushy draws, thickets along streamsides and swamp borders. Nest: built for young; in ground depression. Diet: green vegetation; bark and twigs in the winter. Nocturnal and twilight activity. Home Range: 3 to 20 acres Birth: March-September. Gestation 26-30 days. 3-4 litters/yr.	7 13-16	16 17 18 31 32 98	AZ CO MT NM OR WA WY	
*S. f. *cognatus* (Syflco)				NM	
*S. f. *holzneri* (Syflho)				AZ NM	
*S. f. *llanensis* (Syflll)				NM	
*S. f. *robustus* (Syflro)				NM	
*S. f. *similis* (Syflsi)				CO WY MT	
MOUNTAIN COTTONTAIL (Nuttall's cottontail) *Sylvilagus nuttallii* (Synu)	Northern montane regions, in areas of sagebrush and forest edge situations; found in spruce-pine forest areas, through northern juniper and piñon-juniper woodlands, Prefers a dense shrubby undergrowth (MT), or loose rocks and cliffs. Birth: April through July	4-6 8-13 15 16	5 10 11 18 19 21 22 23 38 39 55	All	
*S. n. *grangeri* (Synugr)				CO ID MT NV WY UT	
*S. n *nuttallii* (Synunu)				CA ID OR WA	
*S. n. *pinetis* (Synupi)				AZ CO NM UT	
DESERT COTTONTAIL (Audubon cottontail) *Sylvilagus audubonii* (Syau)	Found in semi-arid open prairie, dry upland grasslands, semi-desert, sagebrush desert, and piñon-juniper forest edge situations, commonly in canyons, low valleys, or on mesas. Lowland vegetation includes bluegrass, brome grass, various mustards, sagebrush and prickly pear cactus. Upland prairie vegetation includes bluestem, buffalo grass, western wallflower, coneflower, goosefoot, common sunflower, wild alfalfa, and common milkweed. Nest: Built for young; in ground depression; grass-lined. May use abandoned burrows of badgers, prairie dogs, or even pocket gophers. Primarily nocturnal and twilight activity.	3 6-16	23 31 32 33 38 40 42 48 58 59 64 65	AZ CA CO MT NV NM UT WY	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	Home Range: females 1 acre, males up to 15 acres. Birth: All year.				
**S. a arizonae* (Syauar)				AZ CA NV UT	
**S. a. audubonii* (Syauau)				CA	
**S. a. baileyi* (Sauba)				CO MT UT WY	
**S. a. cedrophilus* (Syauce)				AZ NM	
**S. a. minor* (Syaumi)				NM	
**S. a. neomexicanus* (Syaune)				NM	
**S. a. santidiegi* (Syausa)				CA	
**S. a. vallicola* (Syauva)				CA	
**S. a. warreni* (Syauwa)				AZ CO NM UT	
SNOWSHOE HARE (Varying Hare, Jackrabbit) *Lepus americanus* (Leam)	Northern and montane coniferous forest; prefers dense stands of bush in openings in the forest, with riparian situations. Common in fir, lodgepole pine, spruce, and hemlock forested areas. Does not build nest. Diet: Succulent vegetation; twigs, barks and buds in the winter. Nocturnal. Home range: about 10 acres Birth: April to August. Gestation 36-37 days. 2-3 litters. Territorial during breeding.	1 2 4 8-12	1 2 3 5 7 8 12 13 15 18 20 21	CO CA ID MT NV NM OR UT WA WY	
*Nine western subspecies.					
WHITE-TAILED JACKRABBIT *Lepus townsendii* (Leto)	Open prairie; upland grassland; sage plains; woodland areas including aspen, pine, and spruce that border meadows and pastures; and even alpine tundra. Its range seems to be changing. Does not burrow in soil, but does in snow. Diet: grasses, green vegetation; bark, twigs, and buds in winter. Nocturnal.	4-6 8-16	5 8 15 18 21 23 38 52	CO CA ID MT NV NM OR UT WA WY	
**L. t. campanius* (Letoca)				CO MT NM WY	
**L. t. townsendii* (Letoto)				CA CO ID NV OR UT WA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
BLACK-TAILED JACKRABBIT *Lepus californicus* (Leca) *Nine western subspecies.	Common in grasslands, sagebrush desert, and semi-desert; its range extends up to the edge of ponderosa pine zone. Probably no nest. Diet: green vegetation; seems to depend on succulent vegetation for water. Nocturnal and twilight activity. Breeding: December-September (in south).	1-14	10 33 38 41 48 51 53 55 58 65	All	
WHITE-SIDED JACKRABBIT *Lepus callotis* *(Lepus mexicanus)* (Lecal)	Recently collected (July 1974) in a tobosa grass community, in the Upper Animas Valley, NM.	7	58	NM	Rare
ANTELOPE JACKRABBIT *Lepus alleni* (Leal) **L. a. alleni* (Lealal)	Grasses, mesquites, creosote desert, catclaws; on slopes with moderate elevations. Does not build nest. Diet: cacti, other desert plants. Nocturnal and twilight activity. Home range up to 1,000 feet across. Breeding: December-September	7	31 42 43 44 58	AZ NM	

LAGOMORPHA: LEPORIDAE 19

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family APLODONTIDAE - Mountain Beaver					
APLODONTIA (Mountain Beaver) *Aplodontia rufa* (Apru) *Seven subspecies.	Prefers moist situations; on seepage slopes and streamside thickets of willow, alder, and creek dogwood in forested areas; in forests of redwood, ponderosa pine, red fir, spruce, hemlock, or lodgepole pine. Constructs extensive tunnels and runways. Burrows beneath dense streamside vegetation. Diet: includes alder, Douglas fir, western hemlock, skunk cabbage, salmonberry, swordfern, vine maple, & oregon oxalis (OR). Birth: March-April. Gestation 28-30 days.	1-4	1 2 4-9 11 25	CA OR WA NV(W)	
Family SCIURIDAE - Squirrels					
ALPINE CHIPMUNK *Eutamias alpinus* (Eual)	High Sierra Nevada, on cliffs, talus slopes and on the forest floor.	4	5 7 8 52	CA	
LEAST CHIPMUNK *Eutamias minimus* (Eumi)	Wide range of habitats; low semi-arid sagebrush and greasewood desert, through brushy ravines, high-mountain coniferous and northern-mixed hardwood forests; abundant along slopes with pricklypoppy, soapweed, pricklypear cactus, wild plum, choke cherry, hackberry, wild rose, mountain mahogany (Black Hills), or northern juniper.	2 4-16	5 8 15 17 18 21 23 24 28 38 40 53 55 64 66	All	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*Fourteen western subspecies.	Nest: beneath stumps, logs, or rocks, in a burrow. Diet: vegetation, seeds, nuts, fruits, insects. Active spring, summer, and fall. Hibernates.				
YELLOW-PINE CHIPMUNK *Eutamias amoenus* (Euam) *Thirteen western subspecies.	Common in open coniferous forests and forest edges, among yellow-pine and Douglas fir; ranges from valley floors to the lower edge of the subalpine spruce-fir forest; occupies rocky areas with brush or scattered pines; burned-over areas with stumps and brush are favorable. Nest: in extensive ground burrow; no loose soil at burrow entrance; nest constructed with sedge leaves mixed with blue grouse feathers. Diurnal. Climbs trees. Hibernates November to March in north. Closely associated with Cascades Golden-mantled ground squirrel. Birth: May to early June.	2 4 5 8 9	2-5 8 10 11 12 14 15	CA(N) ID MT NV OR UT WA WY	
TOWNSEND'S CHIPMUNK *Eutamias townsendii* (Euto) **E. t. cooperi* (Eutoco) **E. t. townsendii* (Eutoto)	Pine, Redwood, Hemlock, and Fir forests of the central Sierra Nevada and Cascade Mountains; occupies adjacent chaparral. Nest: constructed of sedge leaves and lichen. Diet: probably vegetation, seeds. Birth: May. Hibernates for short periods.	1 2 4	1-7	CA(N) NV(W) OR(W) WA(W)	
YELLOW-CHEEKED CHIPMUNK *Eutamias ochrogenys* (Euoc)	Previously a subspecies of *Eutamias townsendii*.	1 3	6 29	CA OR	
ALLEN'S CHIPMUNK *Eutamias senex* (Euse)	Previously a subspecies of *Eutamias townsendii*.	2 4	5 7 8	CA NV (W) OR	
SISKIYOU CHIPMUNK *Eutamias siskiyou* (Eusi)	Previously a subspecies of *Eutamias townsendii*.	1 3 4	3 4 5	CA OR	
SONOMA CHIPMUNK *Eutamias sonomae* (Euso) **E. s. alleni* (Eusoal) **E. s. sonomae* (Eusoso)	Chaparral; brushy clearings; streamside thickets; open places in Redwood and Yellow-pine forests. Forages among bushes and on ground; sits on a limb, stump, or rock while eating.	3 4	5 6 29 33	CA(NW)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
MERRIAM'S CHIPMUNK *Eutamias merriami* (Eume)	Chaparral, through piñon-juniper woodland up to open coniferous and mixed oak forests; occupies streamside thickets, rock outcropping, and foothill woodlands.	3 4 7	5 30 23 33	CA	
**E. m. kernensis* (Eumeke)					
**E. m. merriami* (Eumeme)					
**E. m. pricei* (Eumepr)					
CLIFF CHIPMUNK *Eutamias dorsalis* (Eudo)	From lower woodland, through piñon-juniper, to coniferous zone, Occupies rocky juniper-clad slopes. May occur at high altitudes.	5-7 9-12	18 19 20 22 23 31 32 37	AZ CO(NW) ID(S) NV UT NM(W)	
**E. d. dorsalis* (Eudodo)				AZ NM	
**E. d. grinnelli* (Eudogr)				NV	
**E. d. utahensis* (Eudout)				AZ CO ID NV UT	
COLORADO CHIPMUNK (Say Chipmunk) *Eutamias quadrivittatus* (Euqu)	Areas of broken rock and open coniferous forests; common in ponderosa and mixed conifer forest, as well as scattered piñon-juniper woodland; occupies rocky slopes and ridges, commonly in brushy areas.	7 1-13	15 18 23	AZ(NE) CO NM(N) UT	
**E. q. hopiensis* (Euquho)					
**E. q. quadrivittatus* (Euququ)				AZ CO NM	
RED-TAILED CHIPMUNK *Eutamias ruficaudus* (Euru)	In yellow-pine, up through the subalpine spruce-fir forest, and into the alpine tundra; most common in forest openings or edges, with abundant shrubby undergrowth found on talus slides.	8	11 12 13 15 52	ID(N) ME(NW) WA(NE)	
**E. r. ruficaudus* (Eururu)				MT	
**E. r. simulans* (Eurusi)				ID MT WA	
GRAY-COLLARED CHIPMUNK (Gray-necked Chipmunk) *Eutamias cinereicollis* (Euci)	Chiefly in yellow-pine forest, and above; common in high Mountain country.	7 12	18 19 21	AZ NM	
**E. c. cinereicollis* (Eucici)				AZ NM	
**E. c. cinereus* (Eucicin)				NM	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
GRAY-FOOTED CHIPMUNK *Eutamias canipes* (Euca)	Forests; marginal pine forest; descending to lower favorable zones.	7	18 21 23	NM	
LONG-EARED CHIPMUNK *Eutamias quadrimaculatus* (Euqua)	Open, brushy, and rocky places in yellow-pine and Douglas-fir forests, in the northern Sierra Nevada. Typically under fallen logs among manzanita bushes.	4	5 7 8 10	CA NV(W)	
LODGEPOLE CHIPMUNK *Eutamias speciosus* (Eusp) **E. s. callipeplus* (Euspca) **E. s. frater* (Euspfr) **E. s. sequoiensis* (Euspse) **E. s. speciosus* (Euspsp)	Subalpine, red fir, and lodgepole forests and adjacent chaparral; typically in the central and northern Sierra Nevada. Birth: early July	3 4 7	5 7 8 33 34	CA NV(W)	
PANAMINT CHIPMUNK *Eutamias panamintinus* (Eupa) **E. p. acrus* (Eupaac) **E. p. panamintinus* (Eupapa)	Piñon-juniper woodland, among boulders and on cliffs; semi-arid areas.	6 7	23 38 40	CA(E) NV(W)	
UINTA CHIPMUNK *Eutamias umbrinus* (Euum) *Seven subspecies.	Yellow-pine zone. Up through subalpine forest; rocky slopes.	6 9-12	5 8 12 15 19 20 22 37	AZ(N) CA CO ID(SE) MT(S) NM(N) UT WY	
PALMER'S CHIPMUNK (Charlston Mountain Chipmunk *Eutamias palmeri* (Eupal)	Coniferous forest, yellow pines to subalpine, in the Charleston Mountains, Nevada; on rocky slopes.	7	22	NV	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
WOODCHUCK (Groundhog, Marmot) *Marmota monax* (Mamo)	Open woodland edges, meadows, stream banks, or rocky bluffs, ranging from valley bottoms up to alpine tundra; avoids dense forest. Dens: in an extensive burrow among rocks, under tree roots, or in meadows with plenty of grass cover. The burrow system may have 2+ openings, and be 4-5 feet deep, and 25-30 feet long. Diet: Tender plants, including various soft grass stems, leaves, red and white clover, alfalfa, chickweed, flowers and several wild herbs. Diurnal. Hibernates about October to late February. Solitary. Birth: late March-mid May. Gestation 31-33 days.	8	11 12 13 52	ID(N) WA(NE)	
**M. m. petrensis* (Mamope). The only western subspecies.					
YELLOW-BELLIED MARMOT (Rockchuck) *Marmota flaviventris* (Mafl)	Montane areas; in valleys and rocky canyons, meadows in the spruce-fir forest, some in piñon-juniper woodland (NM), talus slopes bordering alpine meadows (CA, OR, WA), and rock or boulder-strewn area of sagebrush and grasses. Den: Usually near a large boulder, serving as a lookout post. Diet: Alfalfa, most grasses. Colonial. Chiefly diurnal. Hibernates late August to late February or March. Solitary. Birth: March-April	2 4-6 8-13 15	3 4 5 7 8 10-15 17 18 20 21 23 52	CO CA ID MT NV NM OR UT WA WY	
*Eleven western subspecies.					
HOARY MARMOT (Whistler) *Marmota caligata* (Maca)	Alpine and subalpine habitats in the northern Rockies, Cascades, and Coast Ranges; on talus slopes near grassy alpine meadows. Den: May run under several layers of loose flat rocks. Diet: Various herbaceous plants, including saxifrage, stonecrop and grass. Diurnal. Solitary. Gregarious. Perches on boulders. Hibernates September-April. Birth: April-May	2 8	3 4 12 15 52	MT ID WA	
**M. c. cascadensis* (Macaca)				WA	
**M. c. nivaria* (Macani)				ID MT	
**M. c. okanagana* (Macaok)				WA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
OLYMPIC MARMOT *Marmota olympus* (Maol)	Alpine meadows of the Olympic Mountains, Washington Burrows under rocks, and on open slopes. Diet: includes sedges, lupines, lilies, some composites, miner's lettuce, heather blossoms, and mosses. Gregarious. Similar to Hoary Marmot. Hibernates September-April. Solitary. Birth: April-May	1	52	WA	
VANCOUVER MARMOT *Marmota vancouverensis* (Mava)	Mountains of Vancouver Island, British Columbia, near WA Hibernates September-April. Solitary.	1	1 2 15	WA	
HARRIS' ANTELOPE GROUND SQUIRREL (Young Antelope Ground Squirrel, Gray-tailed Antelope Ground Squirrel) *Ammospermophilus harrisii* (Amha)	Low arid desert, with sparse vegetation A very curious animal. Probably similar to the White-tailed Antelope Ground Squirrel.	7	41 42 43 44	AZ NM(SW)	
**A. h. harrisii* (Amhaha)				AZ	
**A. h. saxicola* (Amhasa)				AZ NM	
WHITE-TAILED ANTELOPE GROUND SQUIRREL *Ammospermophilus leucurus* (Amle)	Low desert, mostly on rocky or gravelly soil in the alkali sink and creosote bush scrub (CA, OR); semidesert valleys and plateaus (CO); grasslands and marginal piñon-juniper woodland (NM). Prefers level, sandy areas, but also in rocky situations. Digs into banks of ditches. Burrows beneath a creosote bush, or under trees or rocks. Diet: seeds, insects, small animals. Stores seeds. Drinking water unnecessary. Solitary. Active all year. Some may hibernate. Possibly 2 litters/year.	5-7 9 11-13	23 40 41 42 53	AZ CA CO ID NV NM OR UT	
*Six western subspecies.					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
NELSON'S ANTELOPE GROUND SQUIRREL (San Joaquin Antelope Ground Squirrel) *Ammospermophilus nelsoni* (Amne)	Dry, sparsely vegetated areas, on the western side of the San Joaquin Valley, California; loam soils; avoids hot sun. Occupies kangaroo rat burros. Diet: favors red-stemmed filaree and Red brome. Similar to the White-tailed Antelope Ground Squirrel. Associated with the horned lark. Home range: about 11 acres.	3	33 40 48	CA	
TEXAS ANTELOPE GROUND SQUIRREL (El Paso Antelope Ground Squirrel) *Ammospermophilus interpres* (Amin)	In desert, grassland, and lower woodland; on rocky foothills; observed sitting on large boulders and in tops of junipers or large shrubs.	7	23 44 58 59	NM	
TOWNSEND'S GROUND SQUIRREL *Spermophilus townsendii* (Spto) *Six subspecies.	Open, dry, sandy sagebrush valleys; grassland. Burrow: Usually has a small rim of dirt 4-6 inches high around opening. Diet: Green vegetation, seeds, some insects. May damage green crops. Colonial. Dormant May or July to January or February. Home range: 1/2 + mile. Birth: March. Gestation about 24 days.	5 6 7	38 40 55	CA ID NV OR UT WA	
WASHINGTON GROUND SQUIRREL *Spermophilus washingtoni* (Spwa)	Low arid regions; grasslands, low sagebrush, wheatfields, rocky slopes. Avoids dense cover for a clear view from perch. Similar to the Townsend's Squirrel. Emerges from ground in April. Birth: March	5	51 55	OR WA	
IDAHO GROUND SQUIRREL *Spermophilus brunneus* (Spbr)	Dry, rocky ridges; grass and low herbs. Burrows beneath logs and rocks. Meets the range of Townsend's Ground Squirrel. May estivate July to August.	5	51 55	ID(S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
RICHARDSON'S GROUND SQUIRREL (Picket Pin) *Spermophilus richardsonii* (Spri)	Short-grass plains and sagebrush semi-desert. Burrow: in gravelly soil; may have several openings. Diet: seeds, insects, green vegetation, including grama grass herbs, rabbitbrush blossoms, wild sunflower seeds, pig-weeds, bindweed, and sagebrush. Adults estivate in July; emerge in late January or February. Birth: May	5 8-11 16	38 55 63 64 66	CO ID MT OR(SE)	
**S. r. aureus* (Spriau)				ID MT	
**S. r. elegans* (Spriel)				CO UT WY	
**S. r. nevadensis* (Sprine)				ID NV OR	
**S. r. richardsonii* (Spriri)				MT	
UINTA GROUND SQUIRREL *Spermophilus armatus* (Spar)	Central Rocky Mountains; subalpine meadows, forest edges, and valley pasturelands; moist habitats with lush vegetation and soft soil preferred. Diet: green vegetation; may harm green crops. Colonial. Hibernates 4 months of winter. Birth: April. 1 litter/year.	5 8 9 10 12	12 15 20	ID MT UT WY	
BELDING'S GROUND SQUIRREL *Spermophilus beldingi* (Spbe)	Mountain meadows, in yellow pine, red fir, lodgepole and northern juniper forests. Diet: stems and seeds of grasses and leaves; flowers; occasional insects. Large size. Similar to Uinta Ground Squirrel. Hibernates late September to April in the Sierras. Birth: Usually in April.	2 4 6 5 8	5 7 8 10 11 14 22 23	CA ID NV OR UT(NW)	
**S. b. beldingi* (Spbebe)				CA NV	
**S. b. creber* (Spbecr)				ID NV OR	
**S. b. oregonus* (Spbeor)				CA NV OR	
COLUMBIAN GROUND SQUIRREL *Spermophilus columbianus* (Spco)	Subalpine meadows, intermontane valleys, forest edges, open woodlands, grasslands, hay meadows, grain fields, stoney pastures, open pine flats, and alpine tundra. Den: usually on rocky, partly forested, gently sloping hillsides. Diet: leaves and stems of many grasses and herbs, seeds.	5 8	11 12 14 50 51 52 63	ID MT OR WA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	Colonial. Dormant late July or August to March. Birth: late March to early April. Gestation: about 24 days.				
**S. c. columbianus* (Spcoco) **S. c. ruficaudus* (Spcoru)				OR WA	
THIRTEEN-LINED GROUND SQUIRREL *Spermophilus tridecemlineatus* (Sptr)	Dry short grass (Black Hills, NM) or tall grass (MT) prairies, brushy edges, on friable soils; also in some ponderosa parks. Burrow openings usually concealed by grass or shrubs. Diet: includes seeds, weeds, and insects. Solitary. Hibernates, October-March. Prefers warm days. Birth: May. Gestation: 28 days.	7 9-13 15 16	17 18 53 64 65 66 70	AZ(E) CO MT NM UT WY	
*Seven subspecies in the west.					
MEXICAN GROUND SQUIRREL *Spermophilus mexicanus* (Spme)	Taken in the Pecos Valley; in level grasslands, associated with mesquite, cacti, creosote brush, or shrubs. Prefers sandy or gravelly soil. Burrow: usually at base of a mesquite or cactus; usually no mound. Diet: green vegetation, seeds, some insects. Probably similar to Thirteen-Lined Squirrel. Some hibernate. Birth: May Breeding: April	7 13	44 58 59	NM(SE)	
**S. m. parvidens* (Spmepa)					
SPOTTED GROUND SQUIRREL Spermophilus spilosoma (Spsp)	Arid areas of dry, sandy soils preferred; grasslands, deserts, scattered brush; also in open pine forests. Burrow: usually under bushes or rocks; may use abandoned kangaroo rat burrows. Diet: green vegetation, seeds, insects. Active all year. Shy, secretive. Some hibernate August or September until March. Probably 2 litters/year.	7 12 13	18 23 39 42 44 53 58 65	AZ CO NM UT WY(SE)	
**S. s. canescens* (Spspca)				AZ NM	
**S. s. cryptospilotus* (Spspcr)					
**S. s. marginatus* (Spspma)					
**S. s. obsoletus* (Spspob)					
**S. s. pratensis* (Spsppr)				AZ	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
ROCK SQUIRREL *Spermophilus variegatus* (Spva)	Broken terrain; rocky canyons and boulder-covered slopes. Den: usually beneath a boulder; occasionally in a hollow tree. Diet: nuts, seeds, fruits, eggs, insects; stores food in den. Not colonial. Diurnal. Probably hibernates for a short period. Birth: April-August.	6 7 9 11-13	18 23 38 40 41 42 53 58	AZ CA CO NV NM UT	
**S. v. grammurus* (Spvagr)					
**S. v. robustus* (Spvaro)				NV UT	
**S. v. tularosae* (Spvatu)				NM	
**S. v. utah* (Spvaut)					
CALIFORNIA GROUND SQUIRREL (Beechey Ground Squirrel) *Spermophilus beecheyi* (Spbee)	Plains, small meadows, pastures, grainfields, tree and bush covered slopes, rocky outcrops, and granite taluses; sparse low grass and dry, loose soil. Burrow: 5-34 feet long with many openings. Diet: green vegetation, seeds, acorns, mushrooms, fruits, berries, eggs, insects. Diurnal. Colonial. Hibernate from October or November until January. Estivate July-August. Birth: Spring, summer, fall. Gestation 25-30 days.	1-4	5 8 10 30 33 35 48	CA NV(W) OR(W) WA(S)	
*Seven western subspecies.					
MOHAVE GROUND SQUIRREL *Spermophilus mohavensis* (Spmo)	Low, sandy or gravelly desert floor in the alkali sink and creosote bush scrub. Burrow: openings without dirt mounds. Several burrow per individual. Diet: green vegetation, chiefly alfilaria. Chiefly solitary, most active on clear, warm days. Dormant from late summer to early spring. Birth: March-April.	7	40 41 42	CA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
ROUND-TAILED GROUND SQUIRREL *Spermophilus tereticaudus* (Spte)	Lowest, hottest, and driest desert regions, in the alkali sink and creosote bush scrub. Burrows: in wind-drifted sand mounds about the bases of mesquite, creosote, or saltbush. Diet: insects, seeds of plantain, goosefoot, cactus fruit, mesquite beans. Most active mornings and evenings. Birth: March-April	7	40 41 42 43	AZ CA(S) NV(S)	
**S. t. chlorus* (Sptech)				CA	
**S. t. neglectus* (Sptene)				AZ	
**S. t. tereticaudus* (Sptete)				CA NV	
GOLDEN-MANTLED GROUND SQUIRREL (Copperhead) *Spermophilus lateralis* (Spla)	Open montane and subalpine forests of spruce, fir, or pine; forest edge communities; montane meadows surrounded by forest; chaparral. Prefers rock outcrops or talus slopes for cover. Burrow: usually under bushes, tree roots, or rocks. Diet: seeds, fruits, berries, pine nuts, bulbs, roots, eggs, insects, stores food. Hibernates October or November until March to May. 2-5 individuals/acre. Birth: early spring.	1 2 4-14	3 4 5 7 8 10 11 12 14 15 18 19 20 21 22 37 52	All	
*Fourteen subspecies.					
CASCADE GOLDEN-MANTLED GROUND SQUIRREL *Spermophilus saturatus* (Spsa)	The higher, eastern Cascade Mountains of Washington; in spruce, fir and pine forests.	2	3 4 11 15	WA	
BLACK-TAILED PRAIRIE DOG *Cynomys ludovicianus* (Cylu)	Dry, upland short-grass plains; vegetation includes buffalo grass, tumblegrass, and blue grama (Black Hills). Burrow: foot-high mounds at entrances; deep tunnels. Diet: grasses, occasionally grasshoppers and other insects. Diurnal. Gregarious. territorial. Lives in a "town." Communication system. May be dormant, but does not hibernate. Town population 5-23 individuals/acre.	7-13 15 16	17 53 58 59 63 64 65 66	AZ(SE) CO MT NM WY	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	Birth: March-July. Gestation: 28-35 days.				
**C. l. arizonensis* (Cyluar)				AZ NM	
**C. l. ludovicianus* (Cylulu)				CO MT NM WY	
GUNNISON'S PRAIRIE DOG *Cynomys gunnisoni* (Cygu)	Mountain valleys and parks; prefers sloping grounds over edges of meadows; open or slightly brushy country; scattered junipers and pines. Occur where black-tailed prairie dog does not occur. Less colonial than black-tailed prairie dog. Hibernates October or November through March, in the north and high mountain valleys. Birth: early May.	7 11 12	18 19 23 53	AZ CO NM UT	
**C. g gunnisoni* (Cygugu)				CO NM	
**C. g. zuniensis* (Cyguzu)					
UTAH PRAIRIE DOG *Cynomys parvidens* (Cypa)	Restricted to a fifteen-square mile area on Packer Mountain, Utah, Similar to *Cynomys leucurus*.	12	19 20	UT	ENDANGERED SPECIES (Utah)
WHITE-TAILED PRAIRIE DOG *Cynomys leucurus* (Cyle)	Typical of high mountain meadows; less commonly in semi-desert; dominated by "salt sage" and "white sage" (M). Loose social organization. Hibernates in many areas.	9 10 11 12	12 15 23 37 52	CO(W) MT(S) UT(E) WY	
EASTERN GRAY SQUIRREL *Sciurus carolinensis* (Scca)	Introduced into Seattle, Washington, into Golden Gate Park, San Francisco, and other cities.	1 3	2 29 47	CA WA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
WESTERN GRAY SQUIRREL *Sciurus griseus* (Scgr)	Along the Sierra Nevada and coastal regions of California, Oregon, and Washington. Chiefly in the oak and pine-oak forests; along with fairly open redwood and ponderosa pine-fir stands. Nest: in tree cavities; constructed of sticks and shredded bark. Diet: primarily acorns, seeds of conifers. May damage walnut and almond crops. Arboreal. Birth: February-June. Gestation: about 44 days.	1 3 4	2 3 5 6 11 12 26 28 29 30	CA NV(W) OR WA	
**S. g. anthonyi* (Scgran)				CA	
**S. g. griseus* (Scgrgr)				CA NV OR WA	
**S. g. nigripes* (Scgrni)				CA	
ABERT'S SQUIRREL (Tassel-eared squirrel) *Sciurus aberti* (Scab)	Western yellow pine (ponderosa) forests; foothills and lower mountains. Nest: 2-foot diameter; constructed high in pine tree. Diet: pinecones, pine cambium layer, fungi, mushrooms, berries, roots, green vegetation. Breeding: March-May. Birth: May-August.	7 11 12	18 19	AZ CO NM UT	
**S. a. aberti* (Scabab)				AZ NM	
**S. a. chuscensis* (Scabch)				AZ NM	
**S. a. ferreus* (Scabfe)				CO	
**S. a. mimus* (Scabmi)				CO NM	
**S. a. navajo* (Scabna)				UT	
KAIBAB SQUIRREL *Sciurus kaibabensis* (Scka)	Isolated on the Kaibab Plateau, Grand Canyon, Arizona. Tall ponderosa or western yellow pines. Nest: 2-foot diameter; constructed of cut pine twigs; usually high in a pine tree. Diet: Yellow pine cones, pine cambium layer, ponderosa pine bark conifer seeds, mushrooms, berries, roots, green vegetation. Birth: usually May-August.	12	19 20	AZ(NW)	ENDANGERED SPECIES (Arizona)

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
FOX SQUIRREL *Sciurus niger* (Scni)	Open stands of mixed hardwoods; forest edges or well-drained valley bottoms where oak and hickory predominate; cottonwood forests along large river valleys, Was introduced into the West, and has been extending its range. Nest: in tree cavities or tree crotch; constructed of twigs and leaves. Winter nest in hole in tree or high in branches. Diet: nuts, acorns, seeds, roots, berries, fungi, eggs, tree cambium, beetles, and grubs. Birth: February to April and August to September in North, earlier in South. Gestation: 44 days.	5 12 13 15	26 28 29 30	CA CO(NE) ID MT(E) NM(SW) WA WY	
**S. n. rufiventer* (Scniru)				CO MT WY	
NAYARIT SQUIRREL *Sciurus nayaritensis* (Scna)	Pine and oak forests of Sierra Madre and nearby ranges, Mexico. May be occasional to southern Arizona or New Mexico.	7?	19 31	AZ(S)? NM(S)?	
ARIZONA GRAY SQUIRREL *Sciurus arizonensis* (Scar)	Deciduous riparian forest; prefers walnut, sycamore, and cottonwood; also in oak and pine forests. Diet: acorns, nuts, seeds. Arboreal. Similar to *Sciurus carolinensis* in habits.	7 12	18 19 31 32	AZ NM	
**S. a. arizonensis* (Scarar)				AZ NM	
**S. a. catalinae* (Scarca)				AZ	
**S. a. huachuca* (Scarhu)				AZ	
RED SQUIRREL (Chickaree, Pine Squirrel) *Tamiasciurus hudsonicus* (Tahu)	Alpine fir, Engelmann spruce, Douglas fir, yellow pine, ponderosa pine, white spruce, blue spruce, mixed conifers; also in hemlock groves, larch swamps, bur oak groves, and mixed woods of pine, cedar, and birch. Nest: tree cavity, branches, constructed of leaves, twigs, shredded bark. Diet: cones seeds, nuts, eggs, fungi. Chiefly diurnal. Active all year. Territorial. Closely related to Douglas Squirrel.	5 7-12 15	11 12 13 14 15 18 19 20 21 32 37	AZ CO ID MT NM OR UT WA WY	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	Birth: April or May through August or September. Gestation: 38 days.				
**T. h. baileyi* (Tahuba)				MT WY	
**T. h. dakotensis* (Tahuda)				WY	
**T. h. dixiensis* (Tahudi)				UT	
**T. h. fremonti* (Tahufr)				CO NM UT WY	
**T. h. grahamensis* (Tahugr)				AZ	
**T. h. lychnuchus* (Tahuly)				NM	
**T. h. mogollonensis* (Tahumo)				AZ NM	
**T. h. richardsoni* (Tahuri)				ID MT OR	
**T. h. streatori* (Tahust)				ID WA	
**T. h. ventorum* (Tahuve)				ID MT UT WY	
DOUGLAS SQUIRREL (Chickaree, Spruce Squirrel, Timber Squirrel) *Tamiasciurus douglasii* (Tado)	Coniferous forests of the upper pine belt, and in fir spruce, and hemlock forests ranging from San Diego north through the coastal ranges, Sierra Nevada, and Cascades. Will live in rock slides when trees are scarce. Diet: small cones, fungi. Birth: late June and October.	1-5	1-5 8 28 29	CA NV(W) OR WA	
**T. d. albolimbatus* (Tadoal)				CA NV OR	
**T. d. douglasii* (Tadodo)				OR WA	
**T. d. mollipilosus* (Tadomo)				CA OR WA	
NORTHERN FLYING SQUIRREL *Glaucomys sabrinus* (Glsa)	Forested areas of yellow pine, white pine, lodgepole pine, red fir, spruce, mountain hemlock, and redwood; riparian conditions. Nest: constructed of shredded bark and lichens; may occupy old woodpecker holes in red fir trees. Diet: includes coniferous seeds, service berries, mushrooms, Nocturnal. Birth: probably May-June	1 2 4-10 12 15	1-8 11 12 14-17 20	CA ID MT OR NV(W) UT WA WY	
*Eleven western subspecies.					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family GEOMYIDAE - Pocket Gophers					
SOUTHERN POCKET GOPHER (Pygmy Pocket Gopher) *Thomomys unbrinus* (Thum)	Pine and oak forests; in very shallow, rocky soils. Widely distributed.	3 4 6 7 11 12	18 19 20 23 30 31 32 33 40 41 42 48 49 58	AZ(SE) NM(SW) NV CA(S) CO OR(S) UT	
*About 170 western subspecies.					
BOTTA'S POCKET GOPHER (Valley Pocket Gopher) *Thomomys bottae* (Thbo) *(Thomomys umbrinus bottae)*	Widely distributed; well-developed loam soils of warm valleys; montane meadows; some in sandy or rocky areas. Birth: October-June. Gestation: about 19 days Intergrades with *Thomomys umbrinus*.	1 3 4 6 7 9 11 12 13	30	AZ CA CO NV NM UT OR(SW)	
TOWNSEND'S POCKET GOPHER *Thomomys townsendii* (Thto)	Deep soils of river valleys or old lake beds. Birth: March-April. 2 litters/year.	5 6	38 40 55	CA ID NV OR	
**T. t. bachmani* (Thtoba)				NV OR	
**T. t. elkoensis* (Thtoel)				NV	
**T. t. nevadensis* (Thtone)				NV	
**T. t. owyhensis* (Thtoow)				ID	
**T. t. relictus* (Thtore)				CA	
**T. t. similis* (Thtosi)				ID	
**T. t. townsendii* (Thtoto)				ID OR	
NORTHERN POCKET GOPHER *Thomomys talpoides* (Thta)	Broad ecological tolerance; alpine parks and meadows, heavily grazed valley pastureland, disturbed areas of secondary vegetative growth, open pine forests, brushy areas, and grassy prairies. Mostly in deep sandy soils, but also in clays and coarse, gravelly soils. Active early afternoon. Birth: February-June. 1-2 litters/year.	2 5 6 8-16	Wide range	All.	
*About sixty six subspecies.					
IDAHO POCKET GOPHER *Thomomys idahoensis* (Thid)		5	46 55	ID	

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SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
WESTERN POCKET GOPHER (Mazama Pocket Gopher) *Thomomys mazama* (Thma)	From prairies to alpine meadows west of the Cascade Mountains.	1 2 4	3 4 5 52	CA OR WA	
MOUNTAIN POCKET GOPHER (Sierra Pocket Gopher) *Thomomys monticola* (Thmo)	Meadows and rocky slopes; in the pine, fir , spruce, and hemlock forests of the Sierra Nevada. Winter nest: built above ground. Burrow system 20-120 feet long. Tunnels through snow. Birth: July-August.	3 4	5 7 8 52	CA NV(W)	
*About six subspecies.					
CAMAS POCKET GOPHER (Giant Pocket Gopher) *Thomomys bulbivorus* (Thbu)	Willamette Valley, Oregon; found in deep soils, away from pines. Birth: probably April to July. 1 litter/year.	1	25 26 28	OR	
PLAINS POCKET GOPHER *Geomys bursarius* (Gebu)	Grassland, major stream valleys, pastures, alfalfa fields, roadsides; in soft alluvial soils. Nest: in extensive underground burrows; some nest in large mounds on the surface during the winter in the south. Breeding: April-July, or Feburary-August in the south.	7 13 14 16	65 70	CO NM WY	
**G. b. jugossicularis* (Gebuju)				CO NM	
**G. b. lutescens* (Gebulu)				CO WY	
**G. b. major* (Gebuma)				NM	
DESERT POCKET GOPHER *Geomys arenarius* (Gear)	Isolated in the White Sands area, the lower Rio Grande Valley, and the eastern half of the Deming Plain, mostly in New Mexico; found in sandy or loamy soils.	7	44 58	NM(S)	
**G. a. arenarius* (Gearar)					
**G. a. brevirostris* (Gearbr)					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
YELLOW-FACED POCKET GOPHER (Chestnut-faced Pocket Gopher, Mexican Pocket Gopher) *Pappogeomys castanops* (Paca)	Deep friable soils, preferring sandy soils of stream margins; will occupy heavier soils on uplands if local sandy soils are taken over by Geomys. Possibly 2 litters/year.	7 13	53 58 65	NM(E) CO(E)	Rare
**P. c. castanops* (Pacaca)				CO NM	
**P. c. hirtus* (Pacahi)				NM	
**P. c. lacrimalis* (Pacala)				NM	
**P. c. perplanus* (Pacape)				NM	
Family HETEROMYIDAE - Heteromyids					
OLIVE-BACKED POCKET MOUSE (Wyoming Pocket Mouse) *Perognathus fasciatus* (Pefa)	Shortgrass prairies; in gravelly soils or sandy loam. Some captured in a Bouteloua-Stripa Community (NM); closely-spaced vegetation. Gestation: about 4 weeks. 1 litter/year.	9 10 15 16	17 56 64 65 66	CO MT UT WY	Uncommon
**P. f. callistus* (Pefaca)				CO UT WY	
**P. f. fasciatus* (Pefafa)				MT	
**P. f. infraluteus* (Pefain)				CO	
**P. f. litus* (Pefali)				WY	
**P. f. olivaceogriseus* (Pefaol)				MT WY	
PLAINS POCKET MOUSE *Perognathus flavescens* (Pefla)	Fairly widespread, in open areas with sparse vegetation and sandy soil; in the central grasslands and deserts some even in well-developed pinon-juniper woodlands on rocky, brushy hillsides. Burrows: usually under bushes, with concealed entrance. Diet: Small seeds. Breeding: April-July. Probably 2 litters/year.	13 14	23 65 69	CO NM(E) WY(SE)	
**P. f. copei* (Peflaco)				CO NM	
**P. f. flavescens* (Peflafl)				CO WY	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
MERRIAM'S POCKET MOUSE *Perognathus merriami* (Peme)	Open plains; sandy or gravelly soil, and short or sparse vegetation; occasionally rocky outcroppings. Burrow: at the base of a shrub or cactus. Diet: seeds. Breeding: April-November. 2+ litters/year.	7 13 14	23 53 58 65	NM	
This species is synonomous with *Perognathus flavus*.					
SILKY POCKET MOUSE (Baird Pocket Mouse) *Perognathus flavus* (Pefl)	Semiarid shortgrass plains, shrublands, and deserts; prefers loose, sandy soils also found in open juniper woodland. Burrow: typically under yucca, opuntia, or low shrubs, Similar to the Merriam Pocket Mouse. Possibly 2 litters/year. Diet: seeds.	7 11-14	18 23 31 38 39 53 58 65	AZ CO NM UT(SE) WY(SE)	Abundant
**P. f. bimaculatus* (Peflbi)				AZ	
**P. f. bunkeri* (Peflbu)				CO NM WY	
**P. f. flavus* (Peflfl)				AZ NM	
**P. f. fuliginosus* (Peflfu)				AZ	
**P. f. goodpasteri* (Peflgo)				AZ	
**P. f. hopiensis* (Peflho)				AZ CO NM UT	
**P. f. piperi* (Peflpi)				WY	
**P. f. sanluisi* (Peflsa)				CO	
APACHE POCKET MOUSE *Perognathus apache* (Peap)	Grassland areas, sandy sites, and burned-off pinon-juniper woodland, scattered junipers or pines, *Atriplex*, *Artemisia*. Burrow: constructed under cactus or low brush.	7 11 12	23 39 40 53	AZ CO NM UT	
**P. a. apache* (Peapap)					
**P. a. caryi* (Peapca)				CO UT	
**P. a. clemophila* (Peapcl)				AZ	
**P. a. gypsi* (Peapgy)				NM	
**P. a. relictus* (Peapre)				CO NM	
LITTLE POCKET MOUSE *Perognathus longimembris* (Pelo)	Valleys and slopes; in fine, firm, gravelly soils, covered with sandy soils; sagebrush, creosote bush, cactus, occasionally scattered piñon pine and juniper. Diet: primarily small seeds. Range: up to 250 yards in 24 hours.	3 5 6 7 12	23 33 35 38 40 41 46 48	AZ CA ID(SW) UT WY? OR	Easily caught with snap traps baited with rolled oats or seeds.

RODENTIA: HETEROMYIDAE 38

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*Seventeen western subspecies.	Birth: April-July. 1-2 litters/year.				
ARIZONA POCKET MOUSE *Perognathus amplus* (Peam) **P. a. ammodytes* (Peamamm) **P. a. amplus* (Peamamp) **P. a. cineris* (Peamci) **P. a. jacksoni* (Peamja) **P. a. pergracilis* (Peampe) **P. a. rotundus* (Peamro) **P. a. taylori* (Peamta)	Locally common in arid desert areas with scattered vegetation, in Arizona.	7 12	38 42 43	AZ	
SAN JOAQUIN POCKET MOUSE *Perognathus inornatus* (Peino) **P. i. inornatus* (Peinoin) **P. i. neglectus* (Peinone) **P. i. sillimani* (Peinosi)	San Joaquin Valley, California; in dry, open grassy or weedy areas, in fine-textured soil.	3	48	CA	Easily confused with *P. longimembris*.
GREAT BASIN POCKET MOUSE *Perognathus parvus* (Pepa) *Ten subspecies.	Desert and semi-desert, sagebrush-covered plateaus, chaparral, or piñon-juniper woodland; saltbush and greasewood. Burrow: under bushes; entrance concealed. Stores seeds. Chiefly solitary. Inactive during winter. Birth: late spring-early summer. Probably 1 litter/year.	5-10 12	23 33 34 38 40 41 50 51 55	AZ CA ID NV MT(SW) UT WA WY	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
WHITE-EARED POCKET MOUSE *Perognathus alticola* (Peal)	Tehachapi and San Bernardino Mountains, California; in open grassy places or dry broken ferns, in the yellow pine forest and joshua tree woodland.	7	5 23	CA	
P. a. alticola (Pealal) *P. a. inexpectatus* (Pealin)					
YELLOW-EARED POCKET MOUSE (Walker Pass Pocket Mouse) *Perognathus xanthonotus* (Pexa)	Kelso Valley, Walker Pass, Tehachapi Mountains, California; in chaparral, sagebrush, and bunchgrass.	7	23 33 35	CA	
LONG-TAILED POCKET MOUSE *Perognathus formosus* (Pefo)	North of the Colorado River; frequently in or near hot desert canyons and rocky slopes; on gravelly or rocky ground. Birth: May-July.	6 7 12	23 38 40 41 42	AZ(N) CA(SE) NV UT	
*Seven western subspecies.					
BAILEY'S POCKET MOUSE *Perognathus baileyi* (Peba)	Low desert slopes of the coastal ranges, with rocky terrain (S. California); on xeric brushy hillsides in canyons (NM); sparse vegetation. Active all winter. Birth: April-May.	7	42 43	AZ CA(S) NM (SW)	
P. b. baileyi (Pebaba) *P. b. domensis* (Pebado) *P. b. hueyi* (Pebahu)				AZ AZ CA	
HISPID POCKET MOUSE *Perognathus hispidus* (Pehi)	Grassland prairies; short, mixed, or taller bunchgrasses, with preference for sandy loam or loam. Burrow: dug straight down, in open area. Diet: seeds, insects. Active all year in south; inactive part of winter in north. Birth: Any time in south; probably 2 litters/year in north.	7 12-16	58 64 65	AZ CO(W) MT(SE) NM WY	
P. h. paradoxus (Pehipa)					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
DESERT POCKET MOUSE *Perognathus pencillatus* (Fepe) **P. p. angustirostris* (Pepean) **P. p. eremicus* (Pepeer) **P. p. pencillatus* (Pepepe) **P. p. pricei* (Pepepr) **P. p. sobrinus* (Pepeso) **P. p. stephensi* (Pepest)	Open, sandy low desert floors with sparse vegetation, or low grasslands; usually near mesquite, or other shrubs. Inactive during the winter. Birth: May-September.	7	41 42 43 58	AZ CA(SE) NV(S) NM(S)	
ROCK POCKET MOUSE (Intermediate Pocket Mouse) *Perognathus intermedius* (Pein) *Nine subspecies.	Lower grasslands and deserts, in Colorado River Valley; rarely found far from rocky habitat, usually on rocky slopes or old lava flows with sparse vegetation. Birth: May-July.	7 12	38 41 42 43 58	AZ NM UT	
NELSON'S POCKET MOUSE *Perognathus nelsoni* (Pene) *P. n. canescans* (Peneca)	Report of one specimen found 4 miles west of White City, Eddy County, New Mexico; in a rocky area with sparse vegetation.	13	58 59	NM(SE)	
SAN DIEGO POCKET MOUSE *Perognathus fallax* (Pefal) **P. f. fallax* (Pefalfa) **P. f. pallidus* (Pefalpa)	Open, sandy, weed-grown areas in the low desert and foothills of SW California.	3 7	33 35 42	CA(SW)	
CALIFORNIA POCKET MOUSE *Perognathus californicus* (Peca) *Seven subspecies.	Slopes covered with chaparral or live-oaks, south of San Francisco Bay and west of the Sierra Nevada.	3	30 33	CA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
SPINY POCKET MOUSE *Perognathus spinatus* (Pesp) **P. s. rufescens* (Pespru) **P. s. spinatus* (Pespsp)	Hot desert terrain, on rough mesas and rocky slopes, among xerophilous plants. The most arid habitats.	7	42 43	CA(SE)	
DARK KANGAROO MOUSE *Microdipodops megacephalus* (Mimeg) *Twelve subspecies.	Fine, loose sands and gravels, in the alkali sink, shadscale scrub, sagebrush scrub, and rabbitbrush. Burrow: concealed entrance during day. Diet: primarily seeds, preferring the black seeds of the desert star *(Mentzelia albicoulis)*, also insects. Nocturnal. Birth: May-early June.	5 6 7	38 40	CA(E) ID(S) OR(SE) NV UT(W)	
PALE KANGAROO MOUSE (Palid Kangaroo Mouse) *Microdipodops pallidus* (Mipa) **M. p. ammophilus* (Mipaam) **M. p. pallidus* (Mipapa) **M. p. purus* (Mipapu) **M. p. ruficollaris* (Miparu)	Valley east of the White Mountains (CA); in fine, wind-blown sand of the alkali sink and shadscale scrub. Similar to the Dark Kangaroo Mouse.	6 7	40	CA NV	
ORD'S KANGAROO RAT *Dipodomys ordii* (Dior) *Twenty seven western subspecies.	Arid and semi-arid grassland and sagebrush semi-desert; partial to open, sandy areas; optional habitat in sand bars and sandy banks of ephemeral streams; also may be in piles of windblown or alluvial soils along arroyos. Burrows: extensive system. Stores seeds. Nocturnal. Active all year. Birth: May-June.	5-16	38 39 40 53 55 56 58 59 64 65	All	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
GREAT BASIN KANGAROO RAT (Chisel-toothed Kangaroo Rat) *Dipodomys microps* (Dimi) *Fourteen subspecies	Lower elevations; low, hot valleys; desert floor or rocky slopes with sparse sagebrush scrub, shadscale scrub, and greasewood; also in piñon-juniper woodland. Diet: green vegetation, seeds. Nocturnal Birth: May-June.	5 6 7 12	23 38 40	AZ CA ID NV OR UT	
PANAMINT KANGAROO RAT *Dipodomys panamintinus* (Dipa) **D. p. argusensis* (Dipaar) **D. p. caudatus* (Dipaca) **D. p. leucogenys* (Dipale) **D. p. mohavensis* (Dipamo) **D. p. panamintinus* (Dipapa)	Gravelly desert flats; with joshua trees, creosote bush scrub, and piñon-juniper woodland. Nocturnal.	6 7	23 38 41	CA NV	
STEPHEN'S KANGAROO RAT *Dipodomys stephensi* (Dist)	San Jacinto Valley ; W. Riverside & S. San Bernardino Cos., S. California; dry, open, or sparsely brushy areas, with sandy or gravelly soil.		33 35	CA(S)	
BIG-EARED KANGAROO RAT *Dipodomys elephantinus* (Diel)	Southern part of the Gabilan Range, near Pinnades, California; on chaparral-covered slopes. Nocturnal.		33	CA	
SANTA CRUZ KANGAROO RAT (Narrow-faced Kangaroo Rat) *Dipodomys venustus* (Dive) **D. v. santiluciae* (Divesa) **D. v. venustus* (Diveve)	Chaparral, foothill woodland of oaks and pines; on slopes. May be identical to *Dipodomys agilis*.	3	30 33	CA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
AGILE KANGAROO RAT (Pacific Kangaroo Rat) *Dipodomys agilis* (Diag) **D. a. agilis* (Diagag) **D. a. cabezonae* (Diagca) **D. a. fuscus* (Diagfu) **D. a. perplexus* (Diagpe) **D. a. simulans* (Diagsi)	Coastal sagebrush scrub, open chaparral; slopes or washes; gravelly or sandy soil.	3	33 35	CA(SW)	
HEERMANN'S KANGAROO RAT *Dipodomys heermanni* (Dihe)	Valley grassland and foothill woodland, west of the Sierra Nevada; found in partly open gravelly areas, on slopes with sparse chaparral. Den: mound at entrances; long, narrow burrows. Diet: seeds, green vegetation. Active all year. Nocturnal. Breeding: March-August, with peak in April. Usually 1-7 individuals/acre.	2 3 4	5 30 33 48	CA OR	
**Dipodomys h. morrosensis* *(Dihemo)* **D. h. californicus* (Diheca) *Ten other western subspecies.	Morro Bay, California	3	33	CA	ENDANGERED SPECIES
GIANT KANGAROO RAT *Dipodomys ingens* (Diin)	Valley grassland, among sparse vegetation of ephedra, filaree, and peppergrass in W. San Joaquin Valley, California; prefer fine, sandy loam. Burrow: widely spaced, in groups of 2-4. Diet: greens, seeds. Nocturnal. May display territorial behavior. Breeding: January-May	3	47	CA	
BANNER-TAILED KANGAROO RAT *Dipodomys spectabilis* (Disp)	Arid or semiarid grassland with scattered brush, mesquite, or junipers; seems to prefer heavier soils, and avoid basins where basal cover of grass is low. Burrow: openings in mound, 10 foot diameter and 3 foot high; complex system. Stores seeds in den. Nocturnal. Active all year.	7 12 13	41 42 58	AZ NM	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	Birth: January-August. Gestation: 27+ days.				
*D. s. baileyi (Dispba)				NM	
*D. s. clarencei (Dispcl)				AZ NM	
*D. s. perblandus (Disppe)				AZ	
*D. s. spectabilis (Dispsp)				AZ NM	
MERRIAM'S KANGAROO RAT *Dipodomys merriami* (Dime)	Warm deserts and grasslands; sandy to rocky soils; scattered vegetation including mesquite, creosote bush scrub, shadscale scrub, and sagebrush scrub.	3 6 7	38 40 41 42 43 58 59	AZ CA NV NM UT(SW)	
**D. m. merriami* (Dimeme)				AZ CA NM NV	
**D. m. parvus* (Dimepa)				CA	
**D. m. regillus* (Dimere)				AZ	
**D. m. simiolus* (Dimesi)				CA	
**D. m. vulcani* (Dimevu)				AZ UT	
FRESNO KANGAROO RAT (San Joaquin Kangaroo Rat) *Dipolomys nitratoides* (Dini)	Often on arid, alkaline soil in the valley grassland in W. San Joaquin Valley, California; sparse grass growth and low brush. Diet: includes seeds of brome grass and wild oats. Nocturnal. Home range: less than 1/2 acre. Closely related to Merriam's Kangaroo Rat.	3	48	CA(C)	
**D. n. brevinasus* (Dinibr)					
**D. n. exilis* (Diniex)					
**D. n. nitratoides* (Dinini)					
DESERT KANGAROO RAT *Dipodomys deserti* (Dide)	Low deserts; in wind-blown mounds of sand, in the alkali sink, shadscale scrub and creosote bush scrub. Burrow: only in mounds of wind-blown sand. Diet: seeds, green vegetation. Nocturnal. Breeding: February-June. Gestation: 29-32 days.	6 7	40 41 42 43	AZ NV CA(SE)	
**D. d. arizonae* (Didear)				AZ	
**D. d. deserti* (Didede)				AZ CA NV UT	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family CASTORIDAE - Beaver					
BEAVER *Castor canadensis* (Caca)	Streams and lakes, bordered by alders, white birch, aspen, popular, willow or cottonwood trees. Burrow: in stream bank, or in dam. Diet: alder, birch, aspen, poplar, willow, maple. Colonial. Chiefly nocturnal. Aquatic. Birth: April-July. Gestation: about 128 days.	All	Wide range	All	Common
*Fifteen western subspecies.					
Family CRICETIDAE - New World Rats and Mice					
PLAINS HARVEST MOUSE *Reithrodontomys montanus* (Remo)	Chiefly in grassy uplands; prefers short and mid-grass prairie, with low aridity and well- drained soil. Breeding: all year in the south. Gestation: about 21 days.	7 10 11 13 16	17 53 58 64 65 70	AZ(SE) CO NM WY(E)	Rare (AZ)
**R. m. albescens* (Remoal)				CO NM WY	
**R. m. griseus* (Remogr)				NM	
**R. m. montanus* (Remomo)				AZ CO NM	
WESTERN HARVEST MOUSE *Reithrodontomys megalotis* (Reme)	Widespread; mixed-grass prairie lowlands; weed patches and shrub thickets near disturbed situations, such as roadsides, fencerows, and abandoned fields; flood plains and riparian communities with such vegetation as chokecherry, wild plum, wild rose, hackberry, and other shrub thickets. Vegetation along fencerows on the prairie border would include bluegrass, brome grass, cord grass, western wheat grass, and scattered forbs (Black Hills). Foxtail, false redtop, switchgrass (Kansas). Nest: usually on ground or in tall vegetation. Diet: seeds, some insects. Active all year. Breeding: most all year. Gestation: 23-24 days.	1-7 10 12-16	23 33 35 48 50 53 55 64 65 66 (Wide range)	All	
*Eleven western subspecies.					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
SALT MARSH HARVEST MOUSE *Reithrodontomys raviventris* (Rera)	Coastal salt marshes around San Francisco Bay and the lower part of the Sacramento River, California. Nest: Uses song sparrow nest.	3	49	CA	ENDANGERED SPECIES
**R. r. halicoetes* (Reraha) **R. r. raviventris* (Rerara)					
FULVOUS HARVEST MOUSE *Reithrodontomys fulvescens* (Refu)	Grasslands with scattered brush and mesquite; weedy fields and fence rows; common in xeric grass, agave, and dasylirion stands on top of range in Peloncillo Mountains (NM).	7	58	AZ(S) NM (S)	
**R. f. fulvescens* (Refufu) only western subspecies.					
CANYON MOUSE *Peromyscus crinitus* (Pecr)	Usually restricted to rocky habitats; arid conditions; warm dry canyons, desert mountains, old lava flows, or the base of cliff faces in the piñon-juniper zone. Nest: among rocks or in a burrow beneath rocks. Birth: spring, probably early summer.	3-7 9-12	23 38 40 41 42	AZ CA CO ID NV NM OR UT WY(SW)	
**P. c. auripectus* (Pecrau)				AZ CO NM UT	
**P. c. crinitus* (Pecrcr)				CA ID NV OR	
**P. c. disparilis* (Pecrdi)				AZ	
**P. c. doutti* (Pecrdo)				UT WY	
**P. c. pergracilis* (Pecrpe)				ID NV UT	
**P. c. stephensi* (Pecrst)				AZ CA NV UT	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
CALIFORNIA MOUSE *Peromyscus californicus* (Pecal)	Dense chaparral; foothill woodland slopes with live-oaks. Nest: often uses Dusky-footed Woodrat home; in buildings; constructed of twigs and sticks, with a grass lining. Diet: primarily acorns, which are stored in the nest. Breeding: all year.	3	30 33	CA(S)	
**P. c. benitoensis* (Pecalbe) **P. c. californicus* (Pecalca) **P. c. insignis* (Pecalin) **P. c. mariposae* (Pecalma) **P. c. parasiticus* (Pecalpa)					
CACTUS MOUSE *Peromyscus eremicus* (Peer)	Low arid regions; low deserts with sandy soil and sparse vegetation; rocky foothills of desert mountains and hills, up to piñon-pine zone; sometimes on plains and bajadas, especially where mesquite grows in wind-blown sand. Nest: in ground burrow or among rocks. Diet: seeds, insects, probably green vegetation. Climbs trees. Probably 3-4 litters/year.	3 7 12 13	23 33 41 42 43 58	AZ CA(S) NV(S) NM (UT(S)	
**P. e. anthonyi* (Peeran)				AZ NM	
**P. e. eremicus* (Peerer)				Each State	
**P. e. insulicola* (Peerin)				CA	
**P. e. polypolius* (Peerpo)				AZ	
MERRIAM'S MOUSE *Peromyscus merriami* (Pemer)	Scattered localities in Pinal, Pima, and Santa Cruz Counties, Arizona; found in mesquite and scattered brush in the low desert.		42 43	AZ(S)	
DEER MOUSE *Peromyscus maniculatus* (Pema)	Most any dry-land habitat within its range; commoner in rocky areas, in ponderosa, mixed conifer, and spruce-fir forests, and northern sage-grassland; also in grazed or ungrazed pastureland, grassy meadow, stream borders, aspen woodlands, and among bare rock. Nest: in ground burrows, trees, stumps, or buildings. Diet: seeds, nuts, acorns, insects; stores its food. Breeding: normally February-November. Female is territorial.	All	Wide range	All	Abundant
*About 22 western subspecies.					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
WHITE-FOOTED MOUSE *Peromyscus leucopus* (Pele)	Riparian woodlands, commonly in mixed oak, pine, and aspen; brushy areas; soft and sandy soil along arroyos and in grasslands below the woodlands. Burrow: Commonly in arroyo soils or under shrubs in sandy places; may nest in old bird or squirrel nests, or under stumps or logs. Diet: seeds, nuts, and insects; stores food. Breeding: March-June and September-November in the north, all year in south; females are territorial during breeding.	7 11-16	16 17 23 31 32 54 64 65	AZ CO MT NM WY	
**P. l. aridulus* (Pelear)				MT WY	
**p. l. arizonae* (Peleari)				AZ NM	
**P. l. ochraceus* (Peleoc)				AZ	
**P. l. tornillo* (Peleto)				CO NM	
BRUSH MOUSE *Permomyscus boylii* (Pebo)	Arid and Semiarid regions; chaparral; rough, rocky plateaus, mesas, and canyons, primarily in stands of piñon-juniper, or deciduous saxicoline shrubs; warm, rocky hillsides with stands of evergreen oak or other shrubby species (NM). Nest: under rocks, in crevices, under debris. Diet: pine nuts, acorns, seeds, and berries. Breeding: most of year 4 + litters/year.	3 4 6 7 9-14	23 30 31 33 37	AZ CA CO NV NM UT	
**P. b. boylii* (Pebobo)				CA NV	
**P. b. rowleyi* (Peboro)				AZ CA CO NM NV UT	
**P. b. utahensis* (Pebout)				UT	
WHITE-ANKLED MOUSE *Peromyscus pectoralis* (Pepec)	Huachuca Mountains (AZ), and Carlsbad Caverns and McKittrick Hill (NM); rocky areas over limestone substratum; scattered oaks, dwarfed shrubby junipers, desert sumac, whitethorn, ocotillo, lechuguilla, and sotol. Nest: sometimes in buildings. Diet: seeds, acorns, berries. Breeding: April-October. Probably 1 litter/year.	7	31 42 58	AZ(S) NM(S)	
**P. p. eremicoides* (Pepecer)				AZ	
**P. p. laceianus* (Pepecla)				NM	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
PIÑON MOUSE *Peromyscus truei* (Petr) *Nine western subspecies.	Piñon-juniper woodland in rocky areas; brushy places; foothill woodland (CA). Nest: in trees, such as the hollow branches of juniperus; or among rocks. Diet: seeds, nuts. Breeding: spring-summer.	1-4 6 7 9 11 12 13	23 34 35 40 41 42 48 55	AZ CA CO NV NM OR UT	
ROCK MOUSE *Peromyscus difficilis* (Pedi)	Areas of broken rock, on cliffs, canyon walls, and on foothills; usually in piñon-juniper and oak woodlands, but also in ponderosa pine (CO). Birth: early spring-October.	7 11 12 13	15 23 31 55	AZ CO NM UT	
NORTHERN PYGMY MOUSE *Baiomys taylori* (Bata) **B. t. ater* (Bataat)	Well-developed or arid grassland, especially on talls stands. Sporobolus in riparian areas; weedy areas. Nest: on surface or underground. Diet: mostly seeds. Partially colonial. Breeding: January-October. Gestation: about 20 days.	7	42 43 58	AZ(SE) NM(SW)	Rare
NORTHERN GRASSHOPPER MOUSE *Onychomys leucogaster* (Onle) *Ten western subspecies.	Semiarid grasslands and shrublands, down to sagebrush desert; prefers moderately friable soil; mesquite stands. Burrow: used, abandoned burrows, or construct own at base of a shrub. Diet: arthropods and small vertebrates.	5-14 16	23 55 64 65	All	
SOUTHERN GRASSHOPPER MOUSE *Onychomys torridus* (Onto) *Seven western subspecies.	Valley grassland; areas of clay soils or desert pavement.	3 6 7 12 13	23 33 42 48 59	AZ CA NV NM UT(SW)	

RODENTIA: CRICETIDAE 50

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
HISPID COTTON RAT *Sigmodon hispidus* (Sihi)	Warm, moist areas; riparian and grassland areas; cattail marshes; tall grass, weed patches, sedges; along the Colorado River. Nest: on the surface or in a burrow. Diet: chiefly green vegetation, some eggs. Breeding: all year. Gestation: about 27 days. Up to 9 litters/year.	7 12 13 14	31 32 42 43	AZ CA(SE) CO(S) NM	
*Eight western subspecies.					
ARIZONA COTTON RAT *Sigmodon arizonae* (Siar)		7	32 42	AZ	
YELLOW-NOSED COTTON RAT *Sigmodon ochrognathus* (Sioc)	Limited range, from the upper grasslands, to pine-oak forest; in dense vegetation; most common in hillside stands of yucca, prickly pear cactus; agave, dasylirion, bunchgrass, leguminous shrubs, and oaks; usually in very rocky soil. Runways constructed between yucca plants.	7	31 58	AZ(S) NM(SW)	
**S. o. montanus* (Siocmo)					
TAWNY-BELLIED COTTON RAT *Sigmodon fulviventer* (Sifu)	Well-developed grassland; presently limited to SW New Mexico and the middle Rio Grande from Socorro to Sandoval Counties.	7	59	NM	
LEAST COTTON RAT *Sigmodon minimus* (Simi)		7	31 58	AZ(SE) NM(SC)	
**S. m. goldmani* (Simigo)				AZ NM	
**S. m. minimus* (Simimi)				NM	
**S. m. woodi* (Simiwo)				NM	
EASTERN WOODRAT *Neotoma floridana* (Nefl)	Near yuccas and cacti in the west. Nest: constructed of sticks, rocks, bones, and debris; found on rocky ledges or crevices near shrubs or cacti. May be partially colonial. Breeding: spring, summer, fall. Gestation: 30-37 days.	13 14	65 70	CO	
**N. f. campetris* (Neflca)					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
SOUTHERN PLAINS WOODRAT (Gray Woodrat) *Neotoma micropus* (Nemi)	Open areas in grassland, usually away from rocky habitats; dominated by short grasses and opuntia arborescens. Den: typically built at the base of a cactus, chollas, or shrubs; or at the sides of arroyos.	7 12 13	53 58 59 65	CO(SE) NM	
**N. m. canescens* (Nemica)				CO NM	
**N. m. leucophaea* (Nemile)				NM	
WHITE-THROATED WOODRAT *Neotoma albigula* (Neal)	Widespread; from desert to mixed coniferous forest; in pinyon-juniper woodlands; in creosote bush scrub. Nest: in burrow at base of mesquite tree, shrub, or cactus; under rock shelters. Diet: includes species of opuntia.	7 11 12 13	18 19 23 27 42 43 44 53 58 59 70	AZ CO CA(SW) NM UT(SE)	
*Seven western subspecies.					
DESERT WOODRAT *Neotoma lepida* (Nele)	Desert floors of sagebrush scrub; chaparral; rocky slopes; pinyon-juniper woodlands; scattered cactus, yucca or other low vegetation. Den: under rocks, on ground, along cliffs or sometimes in Diet: seeds, acorns, cactus, or fruits. Born premature. Gestation: 30-36 days. 4+ litters/year. Sexual maturity at 60 days.	3 5 6 7 12	23 33 35 38 40 41 42 43	AZ CA CO(W) ID NV OR(SE) UT	
*Fourteen western subspecies.					
STEPHEN'S WOODRAT **Neotoma stephensi* (Nest)	Rocky areas in the pinyon-juniper zone; in vertical crevices in the alluvium or clay of arroyo banks. Nest: commonly constructed of juniper branches.	7 12	23	AZ NM UT(S)	
**N. s. stephensi* (Nestst)				AZ NM	
**N. s. relicta* (Nestre)				AZ NM UT	
MEXICAN WOODRAT *Neotoma mexicana* (Neme)	Mixed coniferous forest; pinyon-juniper woodland; rocky sites with scrub oak or mountain mahogany (CO). Nest: constructed of sticks and debris; in crevices, under logs or tree roots, and in deserted buildings. Diet: acorns, nuts, seeds, fruits, mushrooms, or cactus.	7 11 12 13	18 19 23 31 32	AZ CO NM UT(SE)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	Birth: Spring-Summer				
**N. m. atrata* (Nemeat)				NM	
**N. m. bullata*((Nemebu)				AZ	
**N. m. fallax* (Nemefa)				CO NM	
**N. m. inopinata* (Nemein)					
**N. m. mexicana* (Nememe)				AZ NM	
**N. m. pinetorum* (Nemepi)				AZ NM	
**N. m. scopulorum* (Nemesc)				CO NM	
DUSKY-FOOTED WOODRAT *Neotoma fuscipes* (Nefu)	Various communities west of the Sierra Nevada; heavy chaparral, streamside thickets, deciduous mixed woods. Nest: on ground or in tree; large house made of sticks. Diet: seeds, nuts, acorns, fruits, green vegetation, fungi, stores food near nest. Territorial. Birth: May-June, some in January-October.	1-4	26 28 29 30 33 35	CA OR(W)	
*Ten western subspecies.					
BUSHY TAILED WOODRAT *Neotoma cinerea* (Neci)	Sagebrush scrub, yellow pine forest, red fir forest, lodgepole forest, northern juniper woodland, sitka spruce, and western hemlock (OR, WA); spruce-fir forest and pinyon-juniper woodland (NM); rocky situations. Den: in vertical cracks or crevices, mineshafts, and hollow logs; constructed of dry grass, moss, leaves, and other fibrous materials. Diet: includes conifer seeds, twigs, shoots, and green vegetation. Cliff climber. Breeding: May-September; about 1 litter/year.	1 2 4-16	1 2 5 7 8 10 11 12 15-19 22 23 37 55	All	
*Twelve western subspecies.					
SOUTHERN RED-BACKED MOUSE (Boreal Red-Backed Vole) *Clethrionomys gapperi* (Clga)	Boreal and montane coniferous forests; deciduous forests; mixed forests; brushy riparian habitats; primarily in stands of lodgepole pine, spruce, birch, and aspen woodlands; also on rockslides, or burned-over hillsides with secondary vegetation.	2 5 8-16	11-18 20 21 37	AZ CO ID MT NM OR UT WA WY	Common

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SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*Nine western subspecies.	Nest: a simple platform, usually under roots or logs; near brush, woodpiles, boulders, or under low juniper branches. Diet: seeds, nuts, bark, fungi, green vegetation, some insects. Active day and night. A good climber. Birth: March-October. Gestation: 17-19 days. Probably 2+ litters/year.				
WESTERN RED-BACKED MOUSE (California Red-backed Vole) *Clethrionomys occidentalis* (Cloc)	South of the Columbia River, in deep woods; alder, salmonberry community; large, rotten logs in moist area of forest floor. Diet: primarily underground algae. Embryos reported July-August.	1-4	1 2 25	CA(N) OR(W) WA(W)	
**C. o. californicus* (Clocca)				CA OR	
**C. o. mazama* (Clocma)				CA OR	
**C. o. nivarius* (Clocni)				WA	
**C. o. obscurus* (Clocob)				CA OR	
**C. o. occidentalis* (Clococ)				WA	
HEATHER VOLE (Mountain Phenacomys) *Phenacomys intermedius* (Phin)	Several habitats, dry or moist; open grassy areas; heather patches in the ponderosa pine, lodgepole pine, red fir, spruce, and hemlock forests; also in riparian cottonwood forests; rocky slopes; tundra. Nest: above ground in winter; under rocks, stumps, or debris in summer. Diet: seeds, dwarf birch bark, willow bark, lichens, berries, and green vegetation. Active in twilight and night. Birth: June-September. Gestation: about 21 days. 2+ litters/season.	1 2 4 5 8-12	1 2 4 7 8 10-16 18 20 37	CA CO ID MT NV OR	
**P. i. celsus* (Phince)				CA NV	
**P. i. intermedius* (Phinin)				Widespread	
**P. i. levis* (Phinle)				MT	
**P. i. oramontis* (Phinor)				OR WA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
WHITE-FOOTED VOLE (Pacific Phenacomys) *Phenacomys albipes* (Phal)	Dense forests, near small streams; mixed evergreen forest; riparian alder. Nest: large; constructed high above ground in a tree.	1	1 2 25 26 28	CA(NW) OR(W)	Rare
DUSKY TREE VOLE (Dusky Tree Mouse) *Phenacomys silvicola* (Phsi)	Fir and hemlock forests of NW Oregon. Nest: large, in trees.	1	2	OR(NW)	
RED TREE VOLE (Tree Phenacomys) *Phenacomys longicaudus* (Phlo)	Sitka spruce western hemlock, grand fir, and Douglas fir forests. Nest: bulky; in tree, near trunk, 15-100 feet up; constructed of twigs and conifer needles. Diet: leaves, needles, and occasionally bark of spruce, hemlock, and fir. Arboreal. Highly specialized. Birth: All year.	1 3	1 2	CA(NW) OR(W)	
MEADOW VOLE *Microtus pennsylvanicus* (Mipe) *Nine western subspecies.	Limited to wetlands; grass-sedge communities near permanent water (NM); swampy areas, cattail marshes, and moist meadows, commonly of bluegrass, spearmint, stinging needle, and red clover (Columbia Plateau, Black Hills); streamside habitats at higher elevations, in canyons of spruce, aspen, willows, sedges, grasses, rushes, deciduous bushes, and scattered forbs. Nest: above or below ground; surface runways. Diet: grasses, seeds, sedges, bark, grain and some insects. Active day or night, all year. Good swimmer. Probably territorial part of year. Breeding: all year. Gestation: 21 days	2 5 8-16	11 12 13 15-18 21 37 63 64 65 66	CO ID MT NM UT WA WY	
MONTANE VOLE *Microtus montanus* (Mimo) *Eighteen western subspecies	Wet grassy meadows of the yellow pine, red fir, Engelman spruce, hemlock, and lodgepole forests; near springs (CA, OR, WA); dry grassland or sagebrush-grassland semidesert, and higher in grassy alpine tundra and wet sedge-grass meadows (MT).	1 2 4-12 16	2-5 7 8 10-15 18 20 21 37 52 55	All	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
CALIFORNIA VOLE *Microtus californicus* (Mica)	Wet upland meadows; grassy hillsides; salt and freshwater marshy ground; from the mountains to the shore. Diet: grasses, sedges, other green vegetation. Breeding: all year. Gestation: about 21 days 1+ litter/yr.	1-4	5 8 29 30 33 34 35 36 47 48 49	CA OR	
*Thirteen western subspecies.					
TOWNSEND'S VOLE *Microtus townsendii* (Mito)	Open grasslands in low country west of the Cascades; moist fields, meadows, sedges near water. Extensive burrow and runway systems. Diet: includes yarrow, spotted catsear, and grasses. Prey to the great horned owl and the bobcat. Birth: March-September. Gestation: about 21 days 1+ litter/year.	1 2	1 2	CA(NW) OR WA	
**M. t. pugeti* (Mitopu)				WA	
**M. t. tetramerus* (Mitote) Vancouver Island				WA	
**M. t. townsendii* (Mitoto)				CA OR WA	
LONG-TAILED VOLE *Microtus longicaudus* (Milo)	Widespread; wet mountain meadows and forest edge of the red fir, engelmann spruce, hemlock, yellow pine, lodgepole, and sagebrush forests; near streams. Nest: above ground in winter; burrow in summer. Diet: grasses, bulbs, bark of small twigs. Birth: May-September.	1 2 4-13 15 16	1-5 7 8 10 11 12 15 16 17 18 20 22 55	All	
*Twelve western subspecies.					
MEXICAN VOLE *Microtus mexicanus* (Mime)	Montane meadows and grasslands in ponderosa and mixed coniferous forests; usually in drier, more open areas. Nest: probably above ground in winter; underground in summer; runways and burrows through the grass cover. Diurnal.	7 12	18 19 23 53 58 59	AZ CO(SW) NM UT(S)	
**M. m. guadalupensis* (Mimegu)				NM	
**M. m. hualpaiensis* (Mimehu)				AZ	
**M. m. mogollonenis* (Mimemo)				AZ CO NM	
**M. m. navaho* (Mimenav)				AZ UT	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
WATER VOLE *Arvicola richardsoni* (Arri)	Alpine marshes; swift streams overhung with willows, in grassy-sedgey areas of the alpine and subalpine. Nest: under roots, stumps, logs; burrow entrances along streambanks.	2 5 8-10	3 4 12 13 15 21 52	ID MT OR UT WA WY	
**A. r. arvicoloides* (Arriar)				OR WA	
**A. r. macropus* (Arrima)				ID MT OR UT WA WY	
CREEPING VOLE *Microtus oregoni* (Mior)	Open grassy areas, marshes, meadows, brush, dry slopes; in redwood, fir, spruce, and hemlock forests. Burrow: under forest floor or among grass roots; seldom is above ground. Breeding: May-August, maybe longer.	1 2 4	1 2 3 4 6	CA(NW) OR(W) WA(C&W)	
**M. o. adocetus* (Miorad)				CA OR	
**M. o. bairdi* (Miorba)				CA OR	
**M. o. oregoni* (Mioror)				CA OR WA	
PRAIRIE VOLE *Microtus ochrogaster* (Mioc)	Dry areas; grassland, sagebrush-grass semi-desert, valleys, some lower canyons of mountain streams. Nest: usually underground; extensive runway and burrow systems in dense grass. Active day and night. Birth: March-September. Gestation: 21 days.	9 10 11 13-16	64 65 66	CO MT(E) NM(N) WY	
**M. o. haydeni* (Miocha)				CO MT WY	
**M. o. minor* (Miocmi)				MT	
**M. o. taylori* (Miocta)				CO	
SAGEBRUSH VOLE *Lagurus curtatus* (Lacu)	Arid conditions; loose soil; stands of artemisia, sagebrush, greasewood, or shrub mixtures. Burrow: shallow. Diet: green vegetation, sagebrush. Partially diurnal. Breeding: all year. 1+ litter/year.	5-8 10 11	38 40 55 56 64 66	CA CO ID MT NV OR UT WA WY	
*Six western subspecies.					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
MUSKRAT *Ondatra zibethicus* (Onzi)	Cattail marshes; banks of ponds, lakes, reservoirs, or slow-moving streams; prairie sloughs. Den: a conical house in shallow water, 2 to 3 feet above the surface. Diet: aquatic vegetation; sometimes clams, frogs, or fish. Chiefly aquatic. Breeding: April-August in north, winter in south. Gestation: 22-30 days. 2-3 litters/year.	1 2 5-16	Wide range	All	
*Eight western subspecies.					
NORTHERN BOG LEMMING *Synaptomys borealis* (Sybo)	Sedge-alder bogs within, or on the edge of, dense spruce-fir and lodgepole forests; wet alpine; subalpine meadows; muskey; heaths; sedges. Nest: above ground in winter; underground in summer; runways with litter along edges. Diet: vegetation. Birth: May-August.	2 8	15	MT(N) ID(N) WA(N)	
**S. b. artemisiae* (Syboar)				WA	
**S. b. chapmani* (Syboch)				ID MT WA	
**S. b. wrangeli* (Sybowr)				WA	

Family MURIDAE - Old World Rats and Mice

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
BLACK RAT (Roof Rat) *Rattus rattus* (Rara)	Associated with urban areas; some open fields; chiefly at seaports. Nest: Usually in buildings.	1-14 16		AZ CA CO ID MT NM OR UT WA WY	
NORWAY RAT (Brown Rat, House Rat) *Rattus norvegicus* (Rano)	Associated with urban areas; burrows in building foundations or under debris. Diet: anything edible. Colonial. Home range: less than 100 feet across. Breeding: all year. Gestation: 21-22 days. 12 litters/year possible.	All		All	

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SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
HOUSE MOUSE _Mus musculus_ (Mumu)	Associated with urban areas; some open fields (weedy grasslands, disturbed roadsides). Nest: usually in buildings. Diet: anything edible. Breeding: all year. Gestation: 18-21 days. Several litters/year.	All		All	
*_M. m. domesticus_ (Mumudo) *_M. m. brevirostris_ (Mumubr)					
Family ZAPODIDAE - Jumping Mice					
MEADOW JUMPING MOUSE (Northern Jumping Mouse) _Zapus hudsonius_ (Zahu)	Streamsides with tall grass cover; marshy lowland with growths of liverworts, mosses, grasses, sedges, and white spruce; sometimes with scattered aspen, birch, willow, or ponderosa pine; valley meadows with riparian situations along streams. Nest: 2 to 3 feet underground in winter; on surface, under brush, logs, or stumps during the summer. Diet: seeds, fruits, and insects. Primarily nocturnal. Hibernates October, November to April or May. Breeding: June-August. Gestation 18-21 days. 2-3 litters/season.	10 11 15 16	17 18 64 65 66	CO(NC) MT(SE) WY(E)	
*_Z. h. campestris_ (Zahuca)				MT WY	
*_Z. h. intermedius_ (Zahuin)				MT	
*_Z. h. preblei_ (Zahupr)				CO WY	
WESTERN JUMPING MOUSE _Zapus princeps_ (Zapr)	Grassy areas along streams; grassy meadows and aspen thickets (CA, OR, WA); mesic meadows (NM); lush grass and forb synusiae under mature stands of quaking aspen (CO). Nest: under grasses or herbs. Diet: seeds. Chiefly nocturnal. A good swimmer. Hibernates. Birth: June-July. 1 litter/season.	2 4-14 16	5 8 10-15 18 20 21 22 37	All	
*Ten western subspecies.					
PACIFIC JUMPING MOUSE _Zapus trinotatus_ (Zatr)	Open meadows in redwood, spruce-fir, and hemlock forests; along streams in alder-salmonberry and skunkcabbage marsh (OR).	1 2 3	1 2 5 6 25	CA(NW) OR(W)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	Diet: includes thimbleberry, salmonberry, evergreen, huckleberry, seeds of skunkcabbage, mosses, some underground fungi. Hibernates.			WA(W)	
**Z. t. eureka* (Zatreu)				CA	
**Z. t. montanus* (Zatrmo)				OR	
**Z. t. orarius* (Zatror)				CA	
**Z. t. trinotatus* (Zatrtr)				CA OR WA	
Family ERETHIZONTIDAE - New World Porcupines					
PORCUPINE *Erethizon dorsatum* (Erdo)	Primarily in coniferous forests; some in riparian woodlands, brushy grasslands, sagebrush semi-desert, and along streams and rivers. Den: hollow trees or natural caves. Diet: various plant materials, primarily the cambium layer of conifers. Boreal. Solitary during the summer. Does not hibernate. Breeding: September-October Birth: April-May. Gestation: about 7 months.	All	5 12 13 15 18 22 55	All	
**E. d. bruneri* (Erdobr)				CO	
**E. d. couesi* (Erdoco)				AZ CO NM UT	
**E. d. epixanthum* (Erdoep)				All States	
**E. d. nigrescens* (Erdoni)				ID MT WA	
Family CAPROMYIDAE - Capromyids					
NUTRIA (Coypu) *Myocastor coypus* (Myco)	Introduced; marshy areas, swamps, ponds, and lakes. Nest: in vegetation growing in shallow water. Diet: aquatic plants. Nocturnal Breeding: all year. Gestation: 127-132 days.			CA MT NM OR WA	
**M. c. bonariensis* (Mycobo)					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC ASSOCIATION REGIONS	PHYSIOGRAPHIC ASSOCIATION NUMBERS	STATES	COMMENTS
Family CANIDAE - Canids					
COYOTE (Brush Wolf) *Canis latrans* (Cala)	Widespread; open plains, open woodlands, forest edge, brushy areas, and boulder-strewn areas. Den: in ground; uses other shelter. A true scavenger; a hunter. Chiefly nocturnal. Birth: April-May. Gestation: 60-63 days.	All	Wide range	All	
*Seven western subspecies.					
RED WOLF *Canis rufus* (Caruf)	Seen in southeastern New Mexico.	7 ?		NM (peripheral)	
GRAY WOLF (Timber Wolf) *Canis lupus* (Calu)	Highly adaptable to different habitats; chiefly in forest and tundra areas. A scavenger and hunter; hunts in packs, up to 12 members, during the non-breeding season. Chiefly nocturnal. Birth: April-May. Gestation: 9 weeks	2 7 8 9 11 12 13 15	3 4 5 12 15 18 19 21 55	AZ CA CO ID MT NM UT WA WY	Rare
*Seven western subspecies.					
*NORTHERN ROCKY MOUNTAIN WOLF *Canis l. irremotus* (Caluir)	Wilderness forests. Diet: primarily birds and mammals.	8 9		MT WY	ENDANGERED SPECIES (WY, MT)
RED FOX *Vulpes vulpes* (Vuvu)	Prefers open areas in and near forests of red fir, lodgepole pine, and subalpine; also in the alpine fell-fields. Dens: normally on slopes in porous soil. Diet: fruits, berries, insects, and small mammals, such as	1 2 4 5 6 8 9 10 11 12	3 4 5 7 8 11-15 18 20 21 22	All	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	montane voles and white-tailed hares. Chiefly nocturnal, early evening. Birth: March-April. Gestation: about 51 days.				
V. v. cascadensis (Vuvuca)				OR WA	
V. v. macroura (Vuvuma)				Widespread	
V. v. necator (Vuvune)				CA NV	
KIT FOX *Vulpes macrotis* (Vuma)	Prefers, open, sandy, level ground in grassland and desert; sagebrush, junipers, creosote, and joshua trees. Burrow: inside during day. Forages at night. Diet: primarily small desert rodents. Birth: February-April.	3 5 6 7 12	23 31 33 35 38 40 41 42 43 48 53 58 59	AZ CA CO ID NV NM UT OR	Rare
V. m. mutica (Vumamu)				CA	ENDANGERED (CA).
V. m. arsipus (Vumaar)				CA NM NV	
V. m. macrotis (Vumama)				CA	
V. m. neomexicana (Vumane)				AZ NM	
V. m. nevadensis (Vumanev)				ID NV OR UT	
SWIFT FOX *Vulpes velox* (Vuve)	Open grasslands and deserts. Den: in ground burrow. Carnivorous. Easily trapped. Birth: February-April.	8-13 16	55 63 64 65 66 70	CO MT NM UT WY	ENDANGERED
V. v. hebes (Vuvehe)				MT WY	
V. v. velox (Vuveve)				CO NM	
GRAY FOX *Urocyon cinereoargenteus* (Urci)	Broken country; in areas of brush; woodlands or pinyon-juniper and oak; chaparral; sagebrush communities. Den: in hollow logs, beneath boulders, and sometimes in ground burrows. Omnivorous. Chiefly nocturnal. Secretive. Birth: April-May. Gestation: about 51 days.	1-4 6-14	18 19 23 31 32 33 35 38 40 41 42 43 58	AZ CA CO NV NM OR UT	
U. c. californicus (Urcica)				CA	
U. c. scottii (Urcisc)				AZ CA CO NM NV UT	
U. c. townsendii (Urcito)				CA OR	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
ISLAND GRAY FOX *Urogyon littoralis* (Urli)	The islands off the coast of southern California; it forages in brushy and rocky places along the seacoast.	3	30 33 35	CA	
*Six subspecies.					
Family URSIDAE - Bears					
BLACK BEAR (Cinnamon Bear) *Ursus americanus* (Uram)	Very large range; mountainous areas; chiefly in yellow pine, Douglas fir, red fir, lodgepole, and redwood forests. Omnivorous. Usually solitary. Semi hibernates during winter. Birth: January-February, in winter den. Gestation: 7-7 ½ months.	All	3 4 5 6 7 8 12 15 19 20 21	All	
**U. a. altifrontalis* (Uramal)				CA OR WA	
**U. a. amblyceps* (Uramam)				AZ CO NM UT	
**U. a. californiensis* (Uramca)				CA	
**U. a. cinnamomum* (Uramci)				MT UT OR ID WY	
GRIZZLY BEAR (Brown Bear) *Ursus arctos* (Urar)	Status is uncertain, but is known to be in the high mountains, usually in coniferous forest areas. Omnivorous. Prefers twilight. Usually solitary. Birth: January. Gestation: about 6 months.	7-12	11 12 14 15 21	CO ID MT NV WA WY	ENDANGERED
Family PROCYONIDAE - Procyonids					
RINGTAIL *Bassariscus astutus* (Baas)	Rocky and brushy areas; in grassland and woodland; ridges and cliffs, frequently near streams; chaparral. Den: in caves, crevices along cliffs, hollow trees, under rock piles, unused buildings. Carnivorous. Nocturnal. Partially colonial. Birth: May-June.	1 3 4 6 7 10-13	5 18 19 23 30 31 32 33 35 53 58	AZ CA CO NV NM ID(SE) OR UT	
*Six western subspecies.					

CARNIVORA: URSIDAE, PROCYONIDAE 63

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
RACCOON (Coon, Ringtail) *Procyon lotor* (Prlo)	Adaptable to environmental change; deciduous forest, and grasslands, in riparian situations; along marshes, streams, and lakes. Den: in hollow trees, logs, rock crevices, or ground burrows. Omnivorous. Chiefly nocturnal. Breeding: February-March in the north, earlier in the south.	All	Wide range	All	
*Six western subspecies.					
COATI *Nasua nasua* (Nana)	Open forests. Omnivorous. Chiefly diurnal. An excellent climber. Bands of about twelve members. Birth: June or July. Gestation: about 2-1/2 months.	7 12	18 19 27 31 32	AZ NM	
**N. n. molaris* (Nanamo)					
Family MUSTELIDAE - Mustelids					
MARTEN *Martes americana* (Maam)	Spruce, fir, hemlock, yellow pine, lodgepole, subalpine, and redwood forests. Den: in a hollow tree or log. Diet: includes red squirrels, insects, nuts, and fruits. Chiefly nocturnal. Boreal. Breeding: late July-early August.	1 2 4 8-12	1-8 10-15 18 20 21	CA CO ID MT OR UT NM(N) WA WY	
*Six western subspecies.					
FISHER (Pekan) *Martes pennanti* (Mape)	Mixed coniferous deciduous forests; chiefly upper yellow pine, red fir, and lodgepole forests. Den: in a hollow tree or ground. Omnivorous. Active day and night. Birth: late March-early April. Gestation: 11-12 months.	1 2 4 8 9	1-8 11-15	CA ID MT OR WA	
**M. p. columbiana* (Mapeco)				ID UT	
**M. p. pacifica* (Mapepa)				CA OR WA	
**M. p. pennanti* (Mapeco)				MT	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
ERMINE (Short-tailed Weasel) *Mustela erminea* (Muer)	Red fir, lodgepole, subalpine forests, not far from water; boreal taiga, arctic tundra (MT); montane meadows; lower spruce-aspen parklands; grassy to semi-swampy woodlands (Black Hills). Den: in ground burrows, under stumps or rock piles. Nest of mice fur. Diet: chiefly small rodents and insectivores. Hunts during the day. Birth: April-May. Gestation: 8-1/2 to 10 months.	1 2 4 5 6 8-11 13-16	1-8 11-15 17 18 21 22	CA CO ID MT NV NM(N) OR UT WA WY	
*_M. e. gulosa_ (Muergu)				WA	
*_M. e. invicta_ (Muerin)				ID MT WA	
M. e. muricus (Muermu)				Widespread	
*_M. e. olympica_ (Muerol)				WA	
*_M. e. streatori_ (Muerst)				CA OR WA	
LEAST WEASEL *Mustela nivalis* (Muni)	Prefers open forest or forest edge; also in meadows, fields, and brushy areas. Carnivorous. Chiefly nocturnal. Birth: all year.	8 16	12 16 63 64 66	MT(NE)	
LONG-TAILED WEASEL *Mustela frenata* (Mufr)	Not restricted; common in forested areas, open woodlands, open plains, alpine situations, brushy areas, and on rock piles; near a source of water. Nest: uses old burrows, or under wood or rock piles. Carnivorous. Chiefly nocturnal. Breeding: July-August. Gestation: 205-337 days.	All	Wide range	All	
*Eighteen western subspecies.					
BLACK-FOOTED FERRET *Mustela nigripes* (Munig)	Short and mid-grass prairies; an inhabitat of prairie dog towns. Nest: in prairie dog burrows Diet: prairie dogs Birth: June	7 10-13 15 16	53 63 64 65 66	AZ CO MT NM UT WY	ENDANGERED SPECIES (USA)

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
MINK *Mustela vison* (Muvi)	A variety of habitats, including coniferous and deciduous forests, brushlands, grasslands, and even semi-desert, as long as fish-supporting marshes, lakes, and streams are nearby. Den: along stream or lake banks. Carnivorous. Chiefly nocturnal. An excellent swimmer. Solitary. Breeding: January-March. Gestation: 39-76 days, average 42 days.	1-6 8-16	Wide range	CA CO ID MT NV NM OR UT WA WY	Uncommon
**M. v. aestuarina* (Muviae)				CA NV	
**M. v. energumenos* (Muvien)				CA CO ID MT NM OR UT WA WY	
**M. v. letifera* (Muvile)				CO MT WY	
WOLVERINE *Gulo gulo* (Gugu)	Coniferous forests and alpine tundra in the Cascades and Sierras. Den: Any sheltered place. Omnivorous. Active day and night. Solitary. Probably territorial. Breeding: April-August. Birth: February-April.	4 8	3-8 12-15 20 21 52	CA CO ID(N) MT OR WA	Rare
**G. g. luscus* (Gugulu)				MT CO	
**G. g. luteus* (Gugulut)				CA OR WA	
BADGER *Taxidea taxus* (Tata)	Open situations; from dry deserts and grasslands, to red fir forest and alpine meadows. Den: usually in a gently sloping hillside. Diet: rodents; chiefly nocturnal and early morning. A powerful burrower. Birth: February-May.	All	Wide range	All	
**T. t. berlandieri* (Tatabe)				AZ CA CO NV UT	
**T. t. neglecta* (Tatane)				CA OR WA	
**T. t. sonoriensis* (Tataso)				AZ	
**T. t. taxus* (Tatata)				CO ID MT NV UT	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
SPOTTED SKUNK (Civit) *Spilogale putorius* (Sppu) **S. p. interrupta* (Sppuin)	Variety of habitats; prefers open woods, along streams, among boulders, brushy areas, and prairies. Diet: chiefly deer mice; other mammals and invertebrates Nocturnal. Birth: May-June. Gestation: about 120 days.	10 11	65	CO WY NM(NW)	
WESTERN SPOTTED SKUNK *Spilogale gracilis* (Spgr) *Seven western subspecies.	Rocky and brushy areas in woodland, grassland, desert, and chaparral.	All	Wide range	All	
STRIPED SKUNK *Mephitis mephitis* (Meme) *Eight western subspecies.	Variety of habitats; prefers semi-open country; deciduous forest and grassland; forest edges, open woodland, brushy grassland, open prairies, and riparian vegetation; near water. Den: in ground burrow, rock shelters, or wood piles. Omnivorous. Chiefly nocturnal. Females den together; males are usually solitary. Birth: early May. Gestation: about 63 days.	All	Wide range	All	
HOODED SKUNK *Mephitis macroura* (Mema) **M. m. milleri* (Memami)	Chiefly low desert, but exists in higher situations; along streams and rocky ledges. Birth: May-June.	7	31 32 44 58	AZ NM(SW)	
HOG-NOSED SKUNK (Rooter Skunk) *Conepatus mesoleucus* (Come)	Creosote desert; high desert valleys; canyons in low mountain ranges; warm grassland and woodland; typically in partly wooded, brushy, rocky areas, through pinyon, up to pine-oak forest. Den: in crevices in rock cliffs. Diet: primarily ground insects. Chiefly nocturnal, solitary.	7 11 12 13	31 32 42 58 65	AZ CO NM	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	Birth: April-May. Gestation: about 2 months.				
**C. m. figginsi* (Comefi)				CO NM	
**C. m. fremonti* (Comefr)				CO	
**C. m. venaticus* (Comeve)				AZ NM	
RIVER OTTER *Lutra canadensis* (Loca)	Along streams, marshes, and lakes. Den: in bank, with entrance below water surface. Carnivorous. Sociable. Aquatically adapted. Birth: probably in June.	All	Wide range	All	Rare
**L. c. brevipilosus* (Locabr)				CA NV	
**L. c. canadensis* (Locaca)				MT WY	
**L. c. nexa* (Locane)				CO ID NV UT	
**L. c. pacifica* (Locapa)				OR WA	
**L. c. sonora* (Locaso)				CA CO NM NV UT	
SEA OTTER *Enhydra lutris* (Enlu)	Off San Mateo Country, south to the Santa Barbara Islands, and north to Washington; among kelp beds and along rocky shores. Gregarious. Birth: probably in June.	1	33 35	CA OR WA	
**E. l. nereis* (Enlune)					
**E. l. lutris* (Enlulu)					
Family FELIDAE - Cats					
JAGUAR *Felis onca* (Feon)	Prefers the tropical lowlands further south; typically in low mountains, chaparral, or open forests. Carnivorous. Birth: April-May. Gestation: 99-105 days.	7	18 19 31 32 33	AZ NM	Occasional
**F. o. arizonensis* (Feonar)					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
MOUNTAIN LION (Cougar, Puma, Panther) *Felis concolor* (Feco) *Seven western subspecies.	Last strongholds in rugged mountains, in forests and swamps. Roams widely without cubs. Den: in a sheltered and concealed area. Hunts deer, hares, and rodents. Hunts by stealth. Chiefly nocturnal. Secretive. Birth: any month. Gestation 88-97 days.	All	3 4 7 14 15 19	All	
OCELOT *Felis pardalis* (Fepa) **F. p. sonoriensis* (Fepaso)	No recent records; typically in thick thorn scrub, rocky areas. Birth: Autumn	7	27	AZ NM	Rare
JAGUARUNDI *Felis yagouaroundi* (Feya) **F. y. tolteca* (Feyato)	No recent records; typically in brushy areas, in thorn thickets. Carnivorous. Chiefly nocturnal. Probably 2 litters/year.	7	27	AZ	Extremely rare in United States
LYNX *Felis lynx* (Fely) (Previously was Lynx lynx). **F. l. canadensis* (Lylyca)	Primarily in dense coniferous forest, in higher mountains; in swamps; taiga. Den: in a hollow log, beneath roots, or other sheltered places. Diet: chiefly snowshoe hares. Chiefly nocturnal; solitary. Birth: March; April. Gestation: about 62 days.	2 5 8 9 10 12 15	3 4 12 15 21	CO ID MT UT WA WY	Uncommon

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
BOBCAT (Bay Lynx) *Felis rufus* (Feru) (Previously Lynx rufus)	Primarily in rocky country, from desert and brushlands up to the deciduous and coniferous forests. Den: in rock crevices and hollow logs. Carnivorous. Chiefly nocturnal; solitary. Birth: All year. Gestation: 50-60 days.	All	Wide range	All	
**F. r. baileyi* (Lyruba)				AZ CA CO NM NV UT	
**F. r. californicus* (Lyruca)				CA NV	
**F. r. fasciatus* (Lyrufa)				CA OR WA	
**F. r. pallescens* (Lyrupa)				CA CO ID MT NV OR UT WA WY	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC ASSOCIATION REGIONS	PHYSIOGRAPHIC ASSOCIATION NUMBERS	STATES	COMMENTS
Family TAYASSUIDAE - Peccaries					
COLLARED PECCARY (Javelina) *Dicotyles tajacu* (Dita)	Mesquite savannahs and woodland up to pine forest; in Hidalgo County, New Mexico; southeast and central Arizona.	7	19 27 31 32 42	AZ(S&C) NM(SW)	
**D. t. angulatus* (Ditaan)				NM	
**D. t. sonoriensis* (Ditaso)				AZ NM	
Family SUIDAE - Pig					
WILD BOAR (Domestic Swine) *Sus scrofa* (Susc)	Feral domestic mammal. A small herd in the canyons from the James into White Rock Canyon of the Rio Grande, New Mexico. Monterey, San Luis Obispo, and Butte Counties, and Santa Cruz Island, California. In competition with peccaries.	3 7		CA OR NM	
Family CERVIDAE - Cervids					
WAPITI or ELK (Canadian Elk) *Cervus elaphus* (Ceel)	Semi-open forest; parks and mountain meadows; alpine tundra; foothills valleys; plains. Diet: grasses, herbs, twigs, and bark. Primarily crepuscular. Herds of 25 or more. Old bulls separate from the herd during the summer. Migrate into mountains in spring, back down in the	1-5 8-12 15	3 4 5 12 13 14 15 21 52	AZ CA CO ID MT NM OR UT WA WY	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	fall. Males shed antlers February-March. Rutting season begins around September. Birth: May-June. Gestation about 8-1/2 months.				
**C. e. canadensis* (Ceelca) **C. e. nelsoni* (Ceelne) **C. e. roosevelti* (Ceelro)				Widespread CA OR WA	
TULE ELK *Cervus merriami* (Cena)	Near Tupman, Kern County, California; successfully introduced into Owens Valley, Inyo County, and into Cadre Creek, Colusa County, California. Typically in marshes, river bottoms, and open plains; in valley grassland and sagebrush scrub.	3 4	30 35 48 49	CA	
MULE DEER *Odocoileus hemionus* (Odhe)	Wide range; open montane and subalpine coniferous forest; forest edges; woodland; shrubby open plains; chaparral; desert shrubs. Diet: Primarily oak, juniper, mountain mahogany, pinyon, ceanothus, bitterbrush, Douglas fir, white fir, and ponderosa; some grass and herbs. Solitary, or in small groups. Crespuscular and moonlit nights. Migrate in mountains. Males shed antlers January-February. Rutting season October-December. Birth: June-July. Gestation: about 7 months.	All	Wide range	All	
*Seven western subspecies. *BLACK-TAILED DEER *Odocoileus h. columbianus* (Odheco)	West of the Cascades in Washington and Oregon, down through the coastal ranges of California. Typically in forest edges and brushy places.	1 3		CA OR WA	
WHITE-TAILED DEER (Virginia Deer) *Odocoileus virginianus* (Odvi)	Dense, deciduous-coniferous forest; rough, open, brush country; thickets along streams; woodlands; swamps. Diet: twigs, shrubs, fungi, acorns, grass, and herbs. Solitary, or doe with fawn. Breeding: November-February. Gestation: about 6-1/2 months.	1 2 5 7 - 16	2-5 10-15 18 19 65	All	
FALLOW DEER *Cervus dama* (Ceda)	Introduced species.				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	Weaned at 4 months.				
*COLUMBIAN WHITE-TAILED DEER *Odocoileus v. leucurus* (Odvile)				OR WA	ENDANGERED SPECIES (OR, WA)
**O. v. couesi* (Odvico)				AZ NM	
**O. v. dacotensis* (Odvida)				CO WY MT	
**O. v. ochroura* (Odvioc)				CA ID MT NV OR WA WY	
**O. v. texana* (Odvite)				CO NM	
MOOSE *Alces alces* (Alal)	Wander down from Canada; mainly in northern coniferous forest, extending into the central Rocky Mountains; lakes and swamps. Diet: twigs, bark, saplings, and aquatic vegetation during the summer. Males shed antlers December-February. Rutting season September-October. Primarily nocturnal; solitary, or cow-calf or bull-cow-calf. Birth: May-June. Gestation: about 8 months.	5 8-11	11-15 21 37	CO ID MT UT WA WY	Occasional
**A. a. shirasi* (Alalsh)					
AMERICAN WOODLAND CARIBOU *Rangifer tarandus* (Rata)	Arctic tundra, boreal taiga, coniferous forest, alpine zone, and muskegs of the Rocky Mountain region. Diet: grasses, sedges, and tree lichens. Primarily gregarious in small bands. Polygamous. Rutting season in late September. May migrate. Birth: late May. Gestation about 8 months.	8	11 12 13 15 52	ID(N) MT(NE) WA(NE)	
**R. t. montanus* (Ratamo)					

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family ANTILOCAPRIDAE - Pronghorn					
PRONGHORN (Antelope) _Antilocapra americana_ (Anam)	Prefers open short-grass prairie, shrublands, semidesert, and desert. Diet: weeds, sagebrush, and some grasses. Primarily diurnal and twilight activity. Small bands. May migrate. Breeding: August-October. Birth: April-May in south: May-June in north. Gestation: 230-240 days.	5-13 15 16	33 42 53 55 58 65	All	
*_A. a. americana_ (Anamam)				Widespread	but rare
*_A. a. mexicana_ (Anamme)				NM AZ	
*_A. a. oregona_ (Anamor)				OR WA	
*SONORAN PRONGHORN _Antilocapra a. sonoriensis_ (Anamso)			42	AZ	ENDANGERED SPECIES (USA)
Family BOVIDAE - Bovids					
BISON (Buffalo) _Bison bison_ (Bibi)	Being reintroduced, much by private interest. Open plains, woodland edges. Diet: grasses and some browse. Diurnal. Gregarious. Breeding: July-October. Gestation: about 9 months.	9 12 15 16	10 18 20 55	AZ CA CO ID MT NM UT WA WY	
*_B. b. bison_ (Bibibi)				CA CO ID MT UT WA WY	
*_B. b. athabascae_ (Bibiat)				NM	
MOUNTAIN GOAT _Oreamnos americanus_ (Oram)	Alpine and high subalpine zones, on steep slopes. Diet: mountain vegetation. Primarily diurnal. Groups of up to 10. Breeding: October-December. Birth: May-June.	1 2 8 15	3 4 12 13 15 52	ID MT OR WA	
*_O. a. americanus_ (Oramam)				OR WA	
*_O. a. missoulae_ (Orammi)				ID MT OR WA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
FERAL GOAT *Capra hircus* (Cahi)	Introduced on Catalina Island; feral domestic on the mainland; occurs especially in the more inaccessible parts of the coastal ranges, in Santa Barbara, Ventura, San Luis Obispo, and Monterey Counties, California.	3	30 33 48	CA	
BIGHORN SHEEP *Ovis canadensis*				All states	
*ROCKY MOUNTAIN BIGHORN (Mountain Sheep) *Ovis canadensis canadensis* (Ovcaca)	Reintroduced in many areas. Rugged mountain slopes with sparse trees Diet: mountain vegetation. Gregarious. Birth: May-June. Gestation: about 180 days. Rutting season: November-December.	5 8-12 15 16	12 15 21 52	CO ID MT NM WY OR(NE) UT(N) WA(NE)	
*DESERT BIGHORN *Ovis c. mexicanus* (Ovcame)	Reintroduced in many areas. Rugged mountain slopes with sparse trees. In desert areas. Diet: mountain vegetation.	6 7 12	18 19 21	AZ CA NV NM UT	
*CALIFORNIA BIGHORN *Ovis c. californiana* (Ovcaca)	Reintroduced in many areas. Rugged mountain slopes with sparse trees. Diet: mountain vegetation.	2 5	3 4 5 7 8 52	CA(N) OR WA	
*NELSON'S BIGHORN *Ovis c. nelsoni* (Ovcane)	In desert areas.		22 41	CA(S) NV	
BARBARY SHEEP (Aoudad) *Ammotragus lervia* (Amler)	Native of northern Africa. Introduced in the mountains of San Luis Obispo County, California. In New Mexico these animals are found in Largo Canyon, the Canadian Canyon, Hondo Canyon, and Guadalupe Mountains.	3 7	5 33	CA NM	
IRANIAN IBEX *Capra aegagrus* (Caae)	Introduced species.		?		
ORYX *Oryx gazella* (Orga)	Introduced species.		?		

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC ASSOCIATION		STATES	COMMENTS
		REGIONS	NUMBERS		
Family OTARIIDAE - Eared Seals					
NORTHERN FUR SEAL *Callorhinus ursinus* (Caur)	Gregarious; found on Pribilof Islands, range down along Pacific Coast to California. Breed July-August on land. Males arrive on Land April-May and wait for females. Diet: Mostly fish and squid.		Marine	CA OR WA (Coastal)	
**C. u. cynocephalus* (Caurcy)	Ranges from east of Point Barrow, south to California.				
GUADALUPE FUR SEAL *Arctocephalus townsendi* (Arto)	Found on offshore islands, off California and Mexican coasts.		Marine	CA(S)	
NORTHERN SEA LION *Eumetopias jubata* (Euju)	Off Pacific coast, California to Alaska. Santa Rosa Island, San Nicolas Island.		Marine	CA OR WA	
CALIFORNIA SEA LION *Zalophus californianus* (Zaca)	California north to British Columbia. May be off S. CA coast.		Marine	CA OR WA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family PHOCIDAE - Hair Seals					
HARBOR SEAL *Phoca vitulina* (Phvi)	May be found in harbors, bays, river mouths, and nearby lakes. Have loose colonies. Breeding occurs in the water usually in September. Pups born about 9½ months later on land. Feed on fishes and mollusks.		Marine		
**P. v. geronimensis* (Phvige)	California coast - Point Mugu, Ventura California, southward.			CA	
**P. v. richardii* (Phviri)	Artic and Pacific coasts, from Yukon, southward along coast to California (Monterey, County.)			CA OR WA	
NORTHERN ELEPHANT SEAL *Mirounga angustirostris* (Mian)	Along Pacific Coast, Alaska to Baja California.		Marine	CA OR WA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family AMBYSTOMATIDAE - Ambystomids					
Genus AMBYSTOMA - Mole Salamanders					
NORTHWESTERN SALAMANDER *Ambystoma gracile* (Amgr)	Inhabits open and damp grassland, woodland, or dense forest; found under rocks, logs, bark, and other debris. Spawning is from January to July in ponds, lakes, and streams. There are two subspecies, one in the west:				
*BRITISH COLUMBIA SALAMANDER *Ambystoma gracile decorticatum* (Amgrde)	Found in the Olympic Peninsula, Washington. It is apparently restricted to the coastal humid belt.	1		WA(NW)	
*BROWN SALAMANDER *Ambystoma g. gracile* (Amgrgr)	Common in humid areas, along the Pacific coast.	1	1 2 6	CA OR WA	
LONG-TOED SALAMANDER *Ambystoma macrodactylum* (Amma)	Occupies a variety of habitats, from the sagebrush steppe and cheatgrass plains in the Columbia Plateau, up to alpine meadows and high mountain lakes with barren and rocky shores. It is found in rotting logs, under bark, rock, and other debris near relatively quiet waters. Adults prefer to be in the shallows of the water. Breeding: begins in late January or February in the lower regions, and between April and July in the mountains and the				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	far north. There are five subspecies:				
*WESTERN LONG-TOED SALAMANDER *Ambystoma m. macrodactylum* (Ammama)		1 2	1 2 3 15 28 52	OR(W) WA(W)	
*EASTERN LONG-TOED SALAMANDER *Ambystoma m. columbianum* (Ammaco)		8	11-15 63	ID(W) OR(E & C) WA(E & C)	
*SANTA CRUZ LONG-TOED SALAMANDER *Ambystoma m. croceum* (Ammacr)	Only in Santa Cruz County, California. Urbanization, road building, and manipulation of aquatic habitat has endangered the species. It is protected under both Federal and California law.	3	6 35?	CA	ENDANGERED (CA, USA)
*NORTHERN LONG-TOED SALAMANDER *Ambystoma m. krausei*	Widely distributed. (Ammakr)	5 8	11 12 14 50 51 52 55	ID(C & W) OR(E & C) WA(E & C)	
*SOUTHERN LONG-TOED SALAMANDER *Ambystoma m. sigillatum* (Ammasi)		5	5 7 10 26 34	CA(N) OR(S)	
TIGER SALAMANDER *Ambystoma tigrinum* (Amti)	Found in and near both permanent and temporary pools, ponds, lakes, and streams; from the arid sagebrush desert and grassland to the mountain meadows and spruce-fir forest. Adults are found in crevices, decayed logs, or well underground in the burrows of ground squirrels, gophers, or badgers. Breeding is March through June in the north and at high altitudes; mid-December through February in the lowlands of California; and during the summer rainy season, July and August, in the arid southwest. There are eight subspecies, five in the west:				
*BLOTCHED TIGER SALAMANDER (Northwestern Tiger Salamander) *Ambystoma t. melanostictum* (Amtime)	Adults are found occasionally in damp situations, in logs, bark, boards, and stones.	8-10 16	11-15 52 55 56 64 66	ID MT OR(NE) WA WY (C & W)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*UTAH TIGER SALAMANDER *Ambystoma t. utahensis* (Amtiut)		9-12	12 15 18 20 21 23 37 38 39 52	AZ(N) CO(W) NM(NW) UT WY(S)	
*CLOUDED TIGER SALAMANDER *Ambystoma t. nebulosum* (Amtine)	Some are found in the balsam-fir zone (AZ).	7 12	18-21	AZ(C & N) CO(W) NM(W) UT WY(S)	
*SONORA TIGER SALAMANDER *Ambystoma t. stebbinsi* (Amtist)	Only from the Huachucua Mountains of S. Arizona	7	19 31 58	AZ(S)	
*CALIFORNIA TIGER SALAMANDER *Ambystoma t. californiense* (Amtica)	Generally in dry situations, living underground. Urbanization and manipulation of the aquatic habitat is threatening the survival of the species. It is protected under California State law.	3	30 33 40 48	CA(CW)	Threatened (CA, USA)
*BARRED TIGER SALAMANDER *Ambystoma t. mavortium* (Amtima)	It remains in an underground burrow during the dry season.	13 14	44 53 58 59 65 70	CO(E) NM(CE) WY(SE)	
Genus DICAMPTODON					
PACIFIC GIANT SALAMANDER *Dicamptodon ensatus* (Dien)	Inhabits humid, well-forested areas along the Pacific coast, in or near cold streams or seepages and the rocky shores of mountain lakes. It is found during the day under logs, slabs of bark, large rocks, or other ground debris. The diet of the adults includes land snails, slugs, beetles, moths, and flies. As larvae it eats aquatic insects, water snails, and small crayfish. It is chiefly nocturnal, and is the largest living land salamander in the world.	1 3 4 8	1 2 3 5 26 28 29	CA(N) ID(N) OR(W) WA(W)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Genus RHYACOTRITON					
OLYMPIC SALAMANDER *Rhyacotriton olympicus* (Rhol)	Usually inhabits the edges (splash zone) of small, cold, swift, and rocky mountain streams, springs, and seepages. It is also frequently on moss-covered talus of perennial springs and seepages. The streams are usually well shaded. Along the Oregon coast, Olympic salamanders have occasionally been found in small, relatively slow-flowing, sandy-bottomed streams. All are in the humid coastal regions. Larvae are found in clear shallow water, seepages, and in accumulations of dead leaves in creeks. Eggs are probably laid in June, in running water, attached to the undersides of stones. There are two subspecies:				
*NORTHERN OLYMPIC SALAMANDER *Rhyacotriton o. olympicus* (Rholol)		1	1 2 3 28	OR(NW) WA(W)	
*SOUTHERN OLYMPIC SALAMANDER *Rhyacotriton o. variegatus* (Rholva)		1 4	1 2 6 26 29	CA(N) OR(SW)	
Family SALAMANDRIDAE - Newts					
Genus TARICHA - Pacific Newts					
RED-BELLIED NEWT *Taricha rivularis* (Tari)	Inhabits rapid streams and rivers of the coastal woodlands of redwood. The streams are usually rough, with rocky bottoms. Spawning begins during March and April. The salamander ranges from Sonoma to Humboldt Counties in California.	1	6	CA(NW)	
ROUGH-SKINNED NEWT *Taricha granulosa* (Tagr)	Usually inhabits grassland, woodland, and forest, in cold permanent streams. Some hide under rocks, slabs of bark, logs or rotten wood on the stream banks. Breeding is from late December to July. There are three subspecies:	1 2 4 8	1 2 3 5 6 7 13 25 26 28 29 34	WA(W) OR(W) CO(W)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*NORTHERN ROUGH-SKINNED NEWT (Oregon Newt) *Taricha g. granulosa* (Tagrgr)	Ranges from Santa Cruz County, California, northward. As well as inhabiting streams, lakes, and ponds, the aquatic adults are also found in roadside ditches and burrow pits. The terrestrial newts are found on the forest floor or hiding beneath logs and bark.	1 2 4 8	1 2 3 5 6 7 13 25 26 28 29 34	CA(NW) OR(W) WA(W)	Peripheral in MT
*CRATER LAKE NEWT *Taricha g. mazamae* (Tagrma)	Found on the higher slopes of Mount Mazama, in Crater Lake National Park, Oregon. Its diet includes small insects, amphibian eggs, algae, and occasionally dead arthropods. Breeding is probably July or later.	2	4	OR	
*TWITTY'S NEWT *Taricha g. twittyi* (Tagrtw)	Found in Santa Clara, Santa Cruz, and Marin Counties, Calif. It inhabits streams, ponds, and pools, and is occasionally on land. Breeding is probably as early as February, with the peak in March, and into May.	3	6 30 33	CA	
CALIFORNIA NEWT *Taricha torosa* (Tato)	Occupies larger mountain rivers and streams as well as reservoirs and ponds. There are two subspecies:				
*COAST RANGE NEWT *Taricha t. torosa* (Tatoto)	Found from Mendocino County southward to San Diego, California. It inhabits relatively still water, in the coastal ranges. It is also found on land during the summer, under logs, stones, and in rodent burrows. It is often active by day.	3	29 30 33 35 36 47 48	CA	
*SIERRA NEWT *Taricha t. sierrae* (Tatosi)	Found on the foothills and western slope of the Sierra Nevada. It breeds around April, occupying streams with considerable current.	4	5 33 34	CA	
*WARTY NEWT *Taricha t. klauberi* (Tatokl)	Found in San Diego County, California. It spends most of its life on land near permanent water, which it enters during breeding. It is usually found during the day hidden in leaves and under logs. Breeding usually takes place in Boulder and Cedar Creeks, in San Diego, probably in April.	3	35	CA	

CAUDATA: SALAMANDRIDAE 80

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family PLETHODONTIDAE - Lungless Salamanders					
Genus ANEIDES - Climbing Salamanders					
BLACK SALAMANDER *Aneides flavipunctatus* (Anfl)	Common in burnt-over areas in the southern redwood forests, living under charred logs and slabs, and in the higher fir and pine forests of the coastal ranges. Found under rocks near streams or seepages, in talus of road cuts, and under logs and bark. Requires equable temperatures and moderate to high rainfall. Two subspecies are recognized:				
*SPECKLED BLACK SALAMANDER *Aneides f. flavipunctatus* (Anflfl)	Found in the coastal mountains of California, from north of San Francisco Bay up to Humboldt County. Also found in southernmost Jackson County, OR.	1 3	2 6 29 9	CA(NW) OR(S)	
*SANTA CRUZ BLACK SALAMANDER (Anflni) *Aneides f. niger*	Found in Santa Clara, Santa Cruz, and San Mateo Counties, California. Found at the margins of perennial streams under rocks and debris.	3	6 30	CA(CW)	
SACRAMENTO MOUNTAIN SALAMANDER *Aneides hardyi* (Anha)	Found in the Sacramento, Capitan, and White Mountains of New Mexico. It inhabits the coniferous forests of Douglas fir, white fir, and spruce, usually under logs, bark, boards, and in rock fissures. Habitat destruction by lumber operations, mining, and industrial land use. Protected under NM state law.	7	18 21	NM(S)	ENDANGERED
ARBOREAL SALAMANDER *Aneides lugubris* (Anlu)	Found in the coastal ranges of California, from Humboldt County south to lower California. It is also on the foothills of the central Sierra Nevada, and on islands off the coast. The habitat includes live oak, yellow pine, and black oak. The salamander usually lives in tree cavities, but is also found in logs or stumps, or under stones, bark, boards and logs. Its diet includes insects, isopods, and fungus. It is chiefly nocturnal. Eggs are laid between July and September.	1 3 4	5 9 30	CA(W&C)	
*FARALLON SALAMANDER (Farallon Yellow-spotted Salamander) *Aneides l. farallonensi* (Anlufa)	On South Farallon Island, San Francisco County, California. It is mainly terrestrial due to the absence of many trees, found beneath boards and piles of loose stones, in moist situations.	3	35?	CA	This subspecies is currently not recognized, as the species is monotypic (Dowling 1971).

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
CLOUDED SALAMANDER *Aneides ferreus* (Anfe)	Found from the Columbia River, Oregon, to Medocino County, California. Also in the coastal ranges and on the lower western slopes of the Cascade Mountains. The habitat is in Douglas fir, cedar, alder, and redwood. It is frequently at the borders of clearings, and under the bark of standing or fallen dead trees. The diet consists of small arthropods.	1 2	1 2 3 6 28	CA(NW) OR(W)	
Genus BATRACHOSEPS - Slender Salamanders					
CALIFORNIA SLENDER SALAMANDER *Batrachoseps attenuatus* (Baat)	Abundant in California, in grassland with scattered trees, woodland, and forest. It is found under logs, boards, bark, in damp leaf litter, and in rotting logs. There are two subspecies:				
*NORTHERN SLENDER SALAMANDER (Worm Salamander) *Batrachoseps a. attenuatus* (Baatat)	Found along the Pacific coast from SW Oregon to Los Angeles County, along the western slope of the Sierra Nevada, and on Santa Cruz Island, California. It is usually in both damp and dry soils, in valleys and meadows; under logs, bark boards, stones, in rotting logs, old stumps, and leaf mold. It will retreat into a deep burrow during dry seasons. The diet includes earthworms, slugs, and small arthropods. Breeding occurs in June and July.	1 3	1 2 5 6 29 30 33 34 48	CA OR	
*SOUTHERN SLENDER SALAMANDER *Batrachoseps a. leucopus* (Baatle)	Found from San Diego and Imperial Counties, south into lower California. This race probably prefers moist, but not wet situations.	3 7	33 35 42 48	CA(S)	
SANTA CRUZ ISLAND SLENDER SALAMANDER ***Batrachoseps relictus*** **(Bare)**	Santa Cruz Island, California				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
OREGON SLENDER SALAMANDER *Batrachoseps wrighti* (Bawr)	Found in a limited region in northcentral Oregon, in moist woods of Douglas fir, maple, hemlock, and red cedar. It lives under boards, rocks, the bark and moss of logs, and inside logs in crevices or termite burrows. It is active above ground beginning in April or May.	2	2 3 28	OR(NC)	Scarce
PACIFIC SLENDER SALAMANDER *Batrachoseps pacificus*	Found on San Miguel, Santa Rosa, Santa Cruz, and Santa Barbara Islands off the southern California coast. Also in the coast live-oak woodland and open chaparral of washes, canyon bottoms, and lower mountain slopes. The soil is usually sandy or gravelly. It is common on alluvial deposits at the mouths of canyons. It lives under rocks, bark, and logs in oak woods, and in gardens beneath stones, boards, and potted plants. There are three subspecies:				
*CHANNEL ISLANDS SLENDER SALAMANDER *Batrachoseps p. pacificus* (Bapapa)	Found on islands opposite Santa Barbara and Ventura Counties. It usually hides under leaf litter and rocks, usually with many others.	3	33 35	CA(S)	
*GARDEN SLENDER SALAMANDER *Batrachoseps p. major* (Bapama)	Found in alluvial soil along the coastal plain of southern California and along certain river drainages where coast live oaks are plentiful. It is in Los Angeles, Riverside, and San Bernardino Counties. Usually under logs, boards, rocks or loose gravel.	3	30 35 36	CA(S)	
*CATALINA ISLAND SLENDER SALAMANDER *Batrachoseps p. catalinae* (Bapaca)	Found on Santa Catalina Island, California. Fairly common during the rainy season under surface debris, and is often found in excavations for ditches. It retreats into a deep burrow during the dry season.	3	30 33 35	CA(SW)	
DESERT SLENDER SALAMANDER *Batrachoseps aridus* (Baar)	This species is endangered and is protected by Federal and California state law.	7	Palm Groves Private Land	CA	ENDANGERED (CA, USA)
KERN CANYON SLENDER SALAMANDER *Batrachoseps simatus* (Basi)	Urbanization and road building is endangering this species, and it is protected by California state law. Habitat being destroyed by road construction. Occur beneath pine, oak and prostrate chaparral logs & large rocks, talus & on north slopes.	3	5 30 33	CA	RARE (CA)

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
TEHACHAPI SLENDER SALAMANDER *Batrachoseps stebbinsi* (Bast)	Agricultural spread has endangered this species, and it is protected under California state law. Habitat being destroyed by recent freeway construction and disturbing slopes. Distribution: Piute and Tehachapi Mountains east of Bakersfield. Found in rock talus in foothill woodlands and riparian vegetation.	3	30	CA	RARE (CA)
Genus ENSATINA - Dusky Salamander					
ENSATINA *Ensatina eschscholtzi* (Enes)	Inhabits damp to nearly dry areas. When the weather is very dry or cold, it retreats to rotten logs, rock crevices, or deep holes. The diet includes small invertebrates and insects that live under dead leaves. Breeding is in February and March. There are seven subspecies:				
*MONTEREY SALAMANDER (Red Salamander) *Ensatina e. eschscholzi* (Eneses)	Found on the coastal region of southern California, beneath logs, in mixed hardwoods and softwoods.	3	30 33 35 36	CA(S)	
*YELLOW-BLOTCHED SALAMANDER (Yellow-spotted Salamander) *Ensatina e. croceator* (Enescr)	Found in the interior mountains in Kern County, California It is usually under rotting logs or in leaf mold.	3	5 23	CA(SC)	
*LARGE-BLOTCHED SALAMANDER *Ensatina e. klauberi* (Eneskl)	Found in the interior mountains of extreme south-central California.	3	5 30	CA(SC)	
*OREGON SALAMANDER *Ensatina e. oregonensis* (Enesor)	Widely distributed, from San Francisco Bay northward. It is USUALLY FOUND UNDER BARK	1	1 2 6 26 28	CA(NW) OR(W)	
*PAINTED SALAMANDER *Ensatina e. picta* (Enespi)	Found in a narrow strip along the coast in extreme southern Oregon and northern California. It inhabits the dense redwood forests, fir and spruce woods, and open areas beneath debris.	1	1 2 6 29 34	CA(N) OR(S)	
*SIERRA NEVADA SALAMANDER *Ensatina e. platensis* (Enespl)	Found in the Sierra Nevada. It intergrades with the yellow-eyed race in the west-central foothills	4	5 7 34	CA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*YELLOW-EYED SALAMANDER *Ensatina e. xanthoptica* (Enesxa)	Found in the vicinity of San Francisco Bay, and on the western slopes of the Sierra Nevada, where it intergrades with the Sierra Nevada Salamander.	3 4	30 33 47	CA	
Genus HYDROMANTES - Web-toed Salamanders					
MOUNT LYELL SALAMANDER *Hydromantes platycephalus* (Hypl)	Found in the higher granite exposures of the Sierra Nevada, from Sequoia National Park to Sonora Pass, California. It lives in rock fissures, seepages from streams, under rocks near cliffs, cave openings, melting snow banks, and in the spray zone of waterfalls. It seems to favor north-facing slopes, and is chiefly nocturnal. The diet includes centipedes, spiders, termites, beetles, and flies. It usually can best be found between February and October.	4	5 7	CA	
SHASTA SALAMANDER *Hydromantes shastae* (Hysh)	Known only from limestone country in northern California south of Mount Shasta, in the headwaters of the Shasta Reservoir. It is found in mixed forests of Douglas fir, Digger pine, black oak, and canyon oak. It typically lives in moist limestone fissures and caves. This species' survival is being threatened, and it is protected under California state law.	4	5 26 29	CA(N)	Threatened (CA, USA)
LIMESTONE SALAMANDER *Hydromantes brunus* (Hybr)	Found in the lower Merced Canyon, California. It inhabits limestone areas in the Digger pine-chaparral zone. It lives in crevices usually in cliffs, ledges, and talus, especially where overgrown with moss. Lumber operation, mining, and industrial land use has endangered this species and it is protected under California state law.	4	33 5	CA	ENDANGERED (CA, USA)
Genus PLETHODON - Woodland Salamanders					
VAN DYKE'S SALAMANDER *Plethodon vandykei* (Plva)	Found in both wooded and open areas from the lowland areas well up into the Douglas fir zone. It lives under rocks, logs, and bark near lakes, rivers, streams, and often seepages with very wet soil. There are two subspecies:				
*WASHINGTON SALAMANDER *Plethodon v. vandykei* (Plvava)	Usually lives under bark and stones in moist areas, usually near streams.	1 2	1-4 15	WA(W)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*COEUR D'ALENE SALAMANDER *Plethodon v. idahoensis* (Plvaid)	Inhabits humid Douglas fir and dwarf maple forests, in rock and dirt talus and gravel. This subspecies is now rare due to destruction of its habitat by manipulation of its aquatic habitat, lumber operations, mining, industrial land use, and pollution. It is not protected by law.	8	12-14	ID(N) MT(NW)	Rare (ID)
LARCH MOUNTAIN SALAMANDER *Plethodon larselli* (Plla)	Presently found in Multnomah and Hood River Counties, Oregon, and in Skamania County, Washington. It is chiefly in dense stands of Douglas fir, with a cover of moss and talus. It inhabits lava talus, in rotten wood, under rocks, and bark. This species is threatened due to habitat destruction by urbanization and road building. Presently it is not protected by law.	2	3 4	OR(NC) WA(SC)	Threatened (WA, USA)
DUNN'S SALAMANDER *Plethodon dunni* (Pldu)	Prefers quite wet areas, usually occurring along the coast, in moss-covered rock piles and slides on the shady banks of streams and roadsides. It may go into deep water to escape danger. It may disperse over the forest floor during the rainy season. In Coast Range, occurs in outcrops of fine sandstone or shale. In Cascades, occurs in stabilized basaltic talus.	1 2	1 2 28	CA(NW) OR(W) WA(SW)	
WESTERN RED-BACKED SALAMANDER *Plethodon vehiculum* (Plve)	Common in the humid Douglas fir forests near Portland, Oregon. It frequents rock slides, under rocks, logs, bark, and moss in cool, damp, shady ravines. During warm, wet weather it may be found in almost any suitable forest floor litter.	1	2 28	OR(W) WA(W)	
DEL NORTE SALAMANDER *Plethodon elongatus* (Plel)	Found on slopes covered with redwood, Sitka spruce, and madrono. It is also found among rocks of old riverbeds, outcrops, and moss-covered talus. Usually under rotting logs and slabs of bark. Not common in seepages or very moist areas.	1	1 6	CA(NW) OR(SW)	
SISKIYOU MOUNTAIN SALAMANDER *Plethodon stormi* (Plst)	Known in Jackson and Josephine Counties, Oregon and Siskiyou County, California. It is found among rocks in old riverbeds, road fills, outcrops, and moss-covered talus. Habitat destruction by lumber operations, mining, and industrial land use is threatening this species. It is protected by California state law.	1 4	2 5	CA(NW) OR(S)	Rare (CA)

CAUDATA: PLETHODONTIDAE 86

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
JEMEZ MOUNTAINS SALAMANDER *Plethodon neomexicanus* (Plne)	Found in the Jemez Mountains of New Mexico, on wooded slopes. It lives under rotting logs, lichens, mosses, and similar moisture-retaining forest floor litter. Eggs are laid in early July. The species is endangered and is protected by New Mexico State law. Mixed coniferous forest, with *Acer glabrum, Picea engelmannii, Picea pungens, Pinus ponderosa,* and *Pseudotsuga menziesii.*	11	18 21	NM (Los Alamos and Sandoval Counties).	ENDANGERED (NM

Class AMPHIBIA
Order SALIENTIA - Frogs and Toads

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC ASSOCIATION REGIONS	PHYSIOGRAPHIC ASSOCIATION NUMBERS	STATES	COMMENTS
Family LEIOPELMIDAE - Tailed Frogs					
Genus ASCAPHUS - Tailed Frogs					
TAILED FROG *Ascaphus truei* (Astr)	Inhabits cold, rocky mountain streams in humid forests of Douglas fir, spruce, pine, redwood, maple, alder, and bay. It hides among the rocks at the bottom of the stream, coming onto the shore only on cold, rainy days. Adults usually may be found abroad from April to early September. Eggs are laid from late June to early August, and are attached to the downstream side of rocks in turbulent water. They hatch in August and September (N. ID and SE WA). Manipulation of aquatic habitat, lumber operations, mining, and industrial land use is threatening this species. It is not protected by law.	1 2 8	1-4 6 11-15	CA(NW) ID(N) MT(NW) OR(W) WA(W)	Threatened (MT)
Family RANIDAE - True Frogs					
Genus RANA - True Frogs					
BULLFROG *Rana catesbeiana* (Raca)	Widely introduced. Inhabits lakes, marshes, permanent pools, reservoirs, millponds, and streams. Cattails may be in area. It hides under debris at the water's edge. It breeds in June and July in the northern part of its range.	1-7 10 12 13 14	Wide range	AZ CA CO ID NV NM OR UT WA WY	

SALIENTIA: LEIOPELMIDAE, RANIDAE 88

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
GREEN FROG *Rana clamitans* (Racl)	Found in the grasslands in the south eastern corner of Arizona. Introduced into northwestern Washington and near Ogden, Utah. It is restricted to the water; in lakes, ponds, marshes, streams, and springs. It breeds from March to August (in the eastern U.S.).	1 9	2 37 58	UT WA AZ	
TARAHUMARA FROG *Rana tarahumarae* (Ratar)	Found only in the Pajarito Mountains of Santa Cruz County, Arizona. Inhabits gravelly streams bordered by willows, cottonwoods, and sycamores, along the bottom of canyons, frequently in oak woodland. It may be seen in small pools, under stones, or in niches in cliffs, with a stream or spring nearby. Breeding takes place after the heavy summer rains beginning in July. Habitat destruction by agricultural usage, lumber operations, mining and industrial land use is threatening this species. It is on federal land and is probably protected.	7	31	AZ	Threatened (AZ)
PLAINS LEOPARD FROG *Rana blairi* (Rabl)					?
FOOTHILL YELLOW-LEGGED FROG *Rana boylei* (Rabo)	Restricted to water. Inhabits the margins of gravelly streams, springs, and fresh water lakes, in forest or woodland. It breeds from late March to early May. Egg clusters are attached to stems in shallow water.	1-4	1-3 5 6 26 28-30	CA OR(W)	
MOUNTAIN YELLOW-LEGGED FROG *Rana muscosa* (Ramu)	Found in the mountains in rockwalled canyons. Inhabits open riverbanks, meadow streams, isolated pools and lake borders in the high Sierra Nevada. In rocky streams in the mountains of southern California. It seems to prefer sloping banks, covered with rocks and vegetation, and always remains close to water. It breeds in April, according to one report, and in June and July according to another. It most likely breeds as soon as the snow and ice melt in the mountain lakes.	3 4 7	5 7 8	CA NV(W)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
WOOD FROG *Rana sylvatica* (Rasy)	Found in isolated colonies. It is usually in open grassy areas bordered by willow and aspen thickets, and in tundra ponds. Forest trees such as spruce may be in the area. Chiefly diurnal.	8 11	15	CO(NC) ID(N, peripheral) MT (peripheral) WY(SC)	
MASLIN'S WOOD FROG *Rana maslini* (Rama)	This species is threatened due to commercial exploitation. There is no protection for the species.			CO	Threatened
SPOTTED FROG *Rana pretiosa* (Rapr)	Highly aquatic, preferring cold mountain streams and marshes. It also inhabits cold, unstagnant rivers, springs, pools, and small lakes. Common in areas of woods and meadows. It may inhabit irrigation ditches. Ranges in western Montana, Idaho, Washington, Oregon, extreme northern California, northern Nevada, northern Utah, and western Wyoming. Danger may result to the species due to the manipulation of aquatic habitat, lumber operation, mining, or industrial land use. Breeding begins in February, continuing to July.	1 2 5 6 8 9 12	2 11-15 22 28 37 52	CA(N) ID MT(W) OR WA NV(N, peripheral) UT(N) WY(W)	Rare (MT)
RED-LEGGED FROG *Rana aurora* (Raau)	Common in woodlands in the lowlands and foothills, also found in grassland. It inhabits lakes, ponds, reservoirs, marshes, and slow streams; usually in permanent water. Cattails are commonly in the area, and are used for cover. It may disperse into the woods during and after rains. Breeding takes place from January to July. There are two subspecies:				
*NORTHERN RED-LEGGED FROG *Rana a. aurora* (Raauau)	Found in western Washington and Oregon, into northwestern California. It lives among the ferns and dense vegetation in the coastal forest. It most likely breeds between February and May.	1 2	1 2 5 6 26 28	CA(NW) OR(W) WA(W)	
*CALIFORNIA RED-LEGGED FROG *Rana a. draytoni* (Raaudr)	Found in west-central and southwestern California, in the Sierra Nevada, and has been introduced into Nevada.	3 4	5 6 29 30	CA(W) NV	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
CASCADES FROG *Rana cascadae* (Raca)	Inhabit montane meadows and lakes in the Cascades of WA, OR and northern CA and the Olympic Mountains of WA. Eggs are laid from late May to early July.	1 2 4	3 4 5 52	CA(N) OR(WC) WA(W)	
LEOPARD FROG *Rana pipiens* (Rapi)	Widespread and highly successful. This frog ranges from the desert lowlands high into the pine forests of the mountains. Stays around permanent or semipermanent water. In the spring it inhabits swampy marshes, upland backwaters, overflows, and ponds. In summer it may be found in swamps, grassy woodland, or short grass meadows. Winter is spent in pools or marshes. It may also be found in cattle tanks. It favors areas with cattails and plenty of insects. It breeds in April and May.	All	Wide range	All	
Family HYLIDAE - Tree Frogs and Their Allies					
Genus HYLA - Tree Frogs					
CANYON TREE FROG *Hyla arenicolor* (Hyar)	Found in boulder canyons with permanent or semipermanent streams, and in dry desert lands of the southwest around the infrequent freshwater springs; in general, from desert to ponderosa pine forest. There may be a variety of broadleaf deciduous trees, such as cottonwoods, willows, sycamores, ashes, walnuts, mulberries, locusts, chokecherries and alders. It favors streams with rocky pools and a firm substratum usually of sandstone, granite, or conglomerate. It also inhabits arroyos in semiarid grassland and streams in pine-oak forest. Niches along the streambank are favored hiding places. Breeding is from May through July.	7 12	18 19 23 31 32 53 58	AZ CO(W) NM(W) UT	
MOUNTAIN TREE FROG *Hyla eximia* (Hyex)				NM	ENDANGERED (NM)
CALIFORNIA TREE FROG *Hyla cadaverinia* (Hyca)	Ranges from the desert to the pine forest in the mountains; usually in arid and semiarid country, among rocks near streams and ponds. Common in canyon streams and washes. Breeding occurs during the spring and summer months. The adults are seldom away from the water.	3	5 23 30 33 35 36 48	CA(S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
PACIFIC TREE FROG *Hyla regilla* (Hyre)	Occupies a variety of habitats from sea level high into the mountains. It may inhabit damp recesses among rocks and logs and on the ground in and near marshes, lakes, ponds, irrigation ditches, reservoirs, and slow streams. Located in damp woodland or forest, in meadows, and in grassland. It breeds from early January to mid-May. There is one subspecie;				
*PACIFIC TREE FROG *Hyla r. regilla* (Hyrere)	The diet consists mostly of small insects in the area of ponds and streams. Breeding in the south is from January to May, and probably June and July in the north.	1-8	1-15 23 24 29 30 33 35-38 40 41 55	AZ(W) CA ID MT(W) NV OR WA	
BURROWING TREE FROG *Pternohyla fodiens* (Ptfo)	A terrestrial, burrowing frog. Found in extreme southern Arizona between the Baboquivari Mountains on the east and the Oregon Pipe Cactus National Monument on the west. It occupies open mesquite grassland within the Sonoran Desert, congregating at summer rain pools and ponds. Breeding occurs in July and August. It is nocturnal. Found three miles southwest of Hickiwan, Pima County.	7	27 42	AZ (S, peripheral)	
Genus ACRIS - Cricket Frogs					
LOWLAND CRICKET FROG *Acris crepitans* (Accr)	Found in the shortgrass plains along rivers and ranging widely in the central U.S. It prefers the sunny banks of areas of permanent water; inhabiting swales, lake margins, stream edges, springs, and pasture ponds. It may live in groups, among water plants and in the shoreline vegetation. There are two U. S. subspecies, one in the West:				
*BLANCHARD'S CRICKET FROG *Acris c. blanchardi* (Accrbl)	It breeds from February to late July.	13	59 65 70	CO(NE) NM(SE, peripheral)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Genus PSEUDACRIS - Chorus Frogs					
CHORUS FROG *Pseudacris triseriata* (Pstr)	Found on the high grasslands and mountain forests. It inhabits marshes, meadows, lake margins, grassy pools; usually found on the ground or in low plants near the ground. It has adapted well to human habitation. There are four subspecies, two in the West:				
*WESTERN CHORUS FROG *Pseudacris t. triseriata* (Pstrtr)	Inhabits low bushes and plants, as well as on the ground. It breeds in ditches, swamps, or temporary pools. Breeding from Feburary to June, and later in the north.	7 12	18 19 23 32 53	AZ NM	
*BOREAL CHORUS FROG Pseudacris t. maculata (Pstrma)	This frog breeds in May and early June. Probably found in northeastern Montana, inhabiting the swampy borders of rivers, lakes, ponds, and meadows.	5 9-16	12 15 21 23 52 65 66 98	CO ID MT NM(N) UT WY	
SPOTTED CHORUS FROG *Pseudacris clarki* (Pscl)	Found in the vicinity of marshes. It breeds in shallow-water lily ponds, shallow mesquite ponds, grassy ponds, pools, and roadside ditches.			MT (peripheral)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family LEPTODACTYLIDAE					
Genus ELEUTHERODACTYLUS					
BARKING FROG *Eleutherodactylus augusti* (Elau)	Ranges from dry, hilly areas scattered with yucca, up into open forests. It is most common on rocky hillsides of canyons in woodland areas during the summer rainfall in July and August During the day it hides under rocks and in mines, wells, caves, and fissures. It is many times in limestone areas. Eggs are laid in caves, fissures, and under rocks during the summer rains. There are two subspecies:				
*EASTERN BARKING FROG *Eleutherodactylus a. latrans* (Elaula)	Found in southeastern New Mexico.	13	58 59	NM(SE)	
*WESTERN BARKING FROG *Eleutherodactylus a. cactorum* (Elauca)	Lives along streams near white limestone formations. This subspecies is declared endangered in New Mexico and is protected by state law.	7	31 42 58	AZ (peripheral)	ENDANGERED (NM)
Family PELOBATIDAE - Spadefoot Toads					
Genus SCAPHIOPUS - Spadefoot Toads					
PLAINS SPADEFOOT *Scaphiopus bombifrons* (Scbo)	Found in desert-grassland and shortgrass prairie inhabiting plains, hills, river bottoms, and farmlands. Prefers regions of low rainfall, and loose, sandy or gravelly soil suitable for burrowing. Its diet includes animal matter. Breeding occurs in the muddy waters of temporary summer rain-formed pools, ponds, and small lakes, from May to August.	7 10 12 13 15 16	53 58 59 63-66	AZ(E) CO(E) MT NM WY	
COUCH'S SPADEFOOT *Scaphiopus couchi* (Scco)	Found in a wide variety of desert and grassland habitats: shortgrass plains, mesquite savannah, creosote bush desert, and other areas of low rainfall. It frequents rocky canyons and valley bottomlands, in communities of paloverde, creosotebush, tarbush, and mesquite. It hides in underground burrows, often under logs or similar shelter, and is nocturnal in habit. Breeding occurs in temporary pools, only after heavy rains from April to August. Its diet consists mostly of termites.	7	27 42 43 44 58 59	AZ(S) NM(S) CA(SE)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
WESTERN SPADEFOOT *Scaphiopus hammondi* (Scha)	Found in a wide variety of habitats from the desert, grassland and the foothills, into the pine forests and mountain valleys. It is most common in washes, floodplains of rivers, alluvial fans, playas, and alkali flats, preferring areas of open vegetation and shortgrass where the soil is sandy or gravelly. It lives underground in a burrow. Breeding occurs in quiet streams and temporary pools during periods of temporary rains.	3 7 12 13	19 23 30 31 32 33 35 42 43 44 48 53 58 59	AZ(E) CA(W) CO(SE & SW) NM	
GREAT BASIN SPADEFOOT *Scaphiopus intermontanus* (Scint)	An inhabitant of the Great Basin, occupying areas in sagebrush flats, plains grassland, pinyon-juniper woodland, and extending upward into the spruce-fir forest in Arizona and Utah. It lives in an underground burrow during dry weather. It may be found near canyon pools, irrigation ditches, streams, rain puddles, and water pockets. The water is usually fairly cold.	5-7 10 12	20 22 23 24 38 40 55	AZ(N) CA CO ID NM NV OR UT WA WY	
Family MICROHYLIDAE - Narrow-mouthed Toads					
Genus GASTROPHRYNE - Narrow-mouthed Toads					
WESTERN NARROW-MOUTHED TOAD *Gastrophryne olivacea* (Gaol)	Found in the Sonoran Desert of Arizona, living in desert, mesquite grassland, and up to oak woodland in the Pajarito and Patagonia Mountains. It seeks shelter under logs or dead stumps, in damp burrows, in crevices, and under rocks, bark, and boards. It may commonly be found under the bark of rotten termite-infested stumps. Breeding occurs from March to September, in ponds, roadside ditches, or temporary rain pools. It is usually near clear-water streams as well. It is nocturnal. Currently considered a monotypic species.				
*SINALOA NARROW-MOUTHED TOAD *Gastrophryne o. mazatlansis* (Gaolma)	Found in southcentral Arizona, in the lowland areas. It hides under rocks, in piles of stones, usually at the edge of and in pools, boggy areas, and overflow areas. This subspecies name is currently not used (Dowling, 1971).	7	27 31 42 43 58	AZ(SC)	Subspecies name currently not in use.

SALIENTIA: MICROHYLIDAE 95

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family BUFONIDAE - Toads					
Genus BUFO - True Toads					
COLORADO RIVER ROAD *Bufo alvarius* (Bual)	Ranges from arid mesquite and creosote lowlands up to the oak-sycamore-walnut habitats in the canyons of mountains. It usually inhabits areas near springs, reservoirs, streams, and on irrigated lands. Soil preference is highly varied. Rodent burrows are often used as shelters. Its diet includes spiders, insects, and small lizards. It is nocturnal. Breeding is most likely between May and July. Rainfall usually stimulates activity.	7	27 31 32 42 43 58	AZ(S) CA(SE) NM(SW, peripheral)	
YOSEMITE TOAD *Bufo canorus* (Buca)	Found in the high Sierra Nevadas, from Alpine County to Fresno County, California. It inhabits high, wet mountain meadows and forest edges, along streams and lakes. For shelter it uses the burrows of gophers and meadow mice, or it hides in clumps of grass, sedges, or willows near water. Breeding is from May to July, after the snow melts, in shallow pools, lake margins, or slow parts of streams.	4	5 7 8 52	CA	
WESTERN TOAD *Bufo boreas* (Bubo)	Found in a variety of habitats, commonly in desert, grassland, woodland, and mountain meadows. It inhabits areas in and near ponds, lakes, reservoirs, rivers, streams, and springs. It prefers loose soil for burrowing, but may occupy the burrows of gophers and ground squirrels. It is diurnal at high elevations and in the north. There are four subspecies:				
*BOREAL TOAD *Bufo b. boreas* (Bubobo)	Common in basin floor valleys and moutnain canyons, in tules around water. Breeding is from March to July.	1 2 5 6 8-12	2-4 11-15 20 38 55	CA(N) CO ID MT NV NM (peripheral) OR UT WY	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*CALIFORNIA TOAD *Bufo b. halophilus* (Buboha)	Found in open valleys; rarely in wooded areas. In wet meadows and along lake shores. Breeding is between January and July.	3 4	30 33 48	CA	
*BLACK TOAD *Bufo b. exsul* (Buboex)	Found in a relatively small area in Inyo County, California. Presently its habitat is very dry with low desert brush (Chrysothamnus). Mountains with pinyon-juniper surround the area. Agricultural land use and reduction of suitable aquatic habitat has endangered the subspecies, and it is protected by state law.	6	8 23 38	CA	ENDANGERED (CA)
*AMARGOSA TOAD *Bufo b. nelsoni* (Bubone)	Found in Nye and Lincoln Counties, Nevada. It is restricted to water.	7	23 41	NV	
GREAT PLAINS TOAD *Bufo cognatus* (Buco)	Found in grassland, creosote bush desert, mesquite woodland, and sagebrush plains of the west. It is not dependent upon permanent water for reproduction, and breeds after heavy summer rains in flood plains of streams, overflow bottom lands, and along irrigation ditches. It is nocturnal and is a proficient burrower.	7 12-16	27 41 42 43 53 58 63 64 65 66 69 70	AZ CA(S) CO MT NM NV(S) UT WY	
TEXAS TOAD *Bufo speciosus* (Busp)	Found in mesquite woodland and prairie. It breeds in the quiet waters of natural rain pools, irrigation ditches, and cattle tanks. It is nocturnal.	13	27 59	NM(SE)	
SOUTHWESTERN TOAD *Bufo microscaphus* (Bumi)	Found in semiarid parts of the southwest, in washes, streams, and arroyos. It is common along sandy banks with growths of willows, cottonwoods, and sycamores (CA), and in rocky stream canyons and floodplains with growths of pine and oak (AZ, NM). Reproduction does not depend directly on rainfall, with breeding taking place in brooks or streams. Adults are nocturnal except during breeding. There are two subspecies:				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*ARIZONA TOAD *Bufo m. microscaphus* (Bumimi)	Active day and night. Feeds on insects and snails.	7 12	19 32 41 58	AZ CA(S) NM(W) NV UT	
*ARROYO TOAD *Bufo m. californicus* (Bumica)	Found in inland valleys and foothills, on arroyo stream beds. On the banks usually grow oaks, cottonwoods, and willow. Breeding is from March to June.	3	23 30 33 35 36 48	CA	
WOODHOUSE'S TOAD *Bufo woodhousei* (Buwo)	Has a wide range and habitat. It may be found in sagebrush and prairie flats, grasslands, floodplains, valleys, and woodland. Sandy areas seem to be preferred. Breeding occurs during or just after the rains, in quiet stream pools, lakes, marshes, and irrigation ditches. There are four subspecies, two in the West:				
*ROCKY MOUNTAIN TOAD *Bufo w. woodhousei* (Buwowo)	Very diverse, the restriction just being enough moisture in the area. It may be found in the sagebrush flats (E. MT), prairie flats among chalk cliffs (W. Kansas), the irrigation ditches on mesquite plains (NM), or the floodplains along the Colorado River (AZ). Breeding is during May and June.	2 5 7 10 12-16	19 20 23 53 55 64 65 66	All	
*SOUTHWESTERN WOODHOUSE'S TOAD *Bufo w. australis* (Buwoau)		7	23 31 44 53 58	AZ NM	
DAKOTA TOAD *Bufo hemiophrys* (Buhe)	Found on the prairies, usually close to lakes, ponds, streams, marshes, and roadside ditches. It is chiefly diurnal, but may be active during warm nights.	16	66	MT(NE)	
RED-SPOTTED TOAD *Bufo punetatus* (Bupu)	Found in desert canyons, open grassland, arroyos, and sometimes on the floodplains of rivers. The areas are usually rocky, and it seeks shelter in crevices among the rocks. It breeds from April to September, with a peak in May, in springs, rocky streams, and reservoirs. It is chiefly nocturnal, but it may be diurnal when breeding.	7 12 13	27 31 32 41 42 43 44 53 58	AZ CA CO NM NV(S) UT	

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SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
GREEN TOAD *Bufo debilis* (Bude)	Found on arid and semiarid plains, grassy mesquite flats, valleys, and foothills. There are usually scattered trees and shrubs, mixed with grass in the areas. It breeds in temporary rain pools in streams and ditches, and occasionally reservoirs. Breeding is from late March to mid-June. There are two subspecies, one in the West:				
*WESTERN GREEN TOAD *Bufo d. insidior* (Budein)		7 13	27 58 59 65	AZ CO(S) NM	
SONORAN GREEN TOAD *Bufo retiformis* (Bure)	Its range extends up from Mexico, into southcentral Arizona, in the Sonoran Desert. Inhabits mesquite grassland and creosote bush desert, breeding during the summer in rain-formed pools and sumps.	7	27 42	AZ (peripheral)	

Class REPTILIA
Order CHELONIA

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC ASSOCIATION		STATES	COMMENTS
		REGIONS	NUMBERS		
Family CHELYDRIDAE					
Genus CHELYDRA - Snapping Turtles					
SNAPPING TURTLE *Chelydra serpentina* (Chse)	Appears to be somewhat restricted to water. With a preference for slow streams, rivers, lakes, ponds and marshes, especially where there is an abundance of aquatic plants. Breeding occurs May through November, nesting can occur June through October. Diet consists of birds, mammals, salamanders, frogs, fish, snails, insects, crayfish and aquatic plants. The snapping turtle has the reputation for its tendency to eat anything it can get into its mouth.	13 14 16	64 65 66 70	CO MT NM WY	
Family KINOSTERNIDAE					
Genus KINOSTERNON - Mud Turtles					
YELLOW MUD TURTLE *Kinosternon flavescens* (Kifl)	An aquatic turtle found from open woodlands to semiarid grasslands. Can be seen in permanent and intermittent streams with a preference for those with mud bottoms. Most of their time is spent in the water but they come to land to feed, lay eggs, and bask. Diet consists mainly of insects and mollusks, but captive specimens are known to have eaten meat. As with many turtles, little is known of their breeding and nesting habits.	7 13	31 42 43 58 65	AR(S) CO(SE) NM(SW)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*STEJNEGER'S MUD TURTLE *Kinosternon f. stejnegeri* (Kiflst)		7	42 43	AZ(S)	
BIG BEND MUD TURTLE Kinosternon hirtipes murrayi (Kihimu)		7	42 43	AZ(S)	
SONORA MUD TURTLE *Kinosternon sonoriense* (Kiso)	Primarily known as a woodland turtle, found in piñon and juniper or oak and also in ponderosa pine and Douglas fir. A very aquatic turtle found in creeks, ditches, ponds and residual water holes.	3 7 12	18 19 23 31 32	AZ(S) CA(SE) NM(S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family EMYDIDAE					
Genus CLEMMYS - Pond Turtle					
WESTERN POND TURTLE *Clemmys marmorata* (Clma)	A frequenter of rivers, streams, ponds, marshes and irrigation ditches, especially those with rocky or muddy bottoms that are grown to such aquatic plants as water cress, water lily and cattails. Their diet contains such things as aquatic plants, insects and carrion. Females emerge from hibernation from April to August, and after mating begin searching for a suitable nesting site.				
*NORTHWESTERN POND TURTLE *Clemmys m. marmorata* (Clmama)	Its habitat and habits are the same as western pond turtle. Habitat destruction by urbanization and road building, with the manipulation of its aquatic habitat, is threatening this turtle. It has no protection.	1 3 6	2 26 30	CA(N) NV(W, peripheral) OR WA	Threatened (WA) No protection
*SOUTHWESTERN POND TURTLE *Clemmys m. pallida* (Clmapa)	Its habitat and habits are the same as western pond turtle.	3	30 48	CA(S)	
Genus CHRYSEMYS					
PAINTED TURTLE *Chrysemys picta* (Chpi)	Found in quiet or sluggish water of small lakes, marshes, ponds, ditches and streams with muddy bottoms. Can be seen basking near the water on mudbanks, rocks and logs. There are four American subspecies, one in the west:				
**Chrysemys p. belli* (Chpibe)		1 2 7 8 9 10 11 12 13	11 12 15 64 65 66	CO(W) ID(N) MT NM OR(N) UT(S) WA WY(W)	
BIG BEND TURTLE *Chrysemys scripta gaigeae* (Chscga)	A basically aquatic turtle that is not very often found on land. Can often be seen sunning itself alone or in a group. As with many turtles, this species shows a preference for quiet water and muddy bottoms. Diet consists of crayfish, tadpoles, fish and snails.	7	58	NM(S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
TEXAS SLIDER *Chrysemys concinna texana* (Chcote)	Primarily a river turtle but has also been known to frequent cattle tanks, ditches, and salt water at the mouths of rivers.	7 13	58 59 65	NM(SE)	
Genus TERRAPENE - Box Turtles					
WESTERN BOX TURTLE *Terrapene ornata* (Teor)	Two races recognized in this species. Chiefly known as a prairie turtle, inhabits treeless plains and gently rolling country grown to grass or scattered low bushes where the soil is sandy; also occurs in open woodlands. Eats insects, berries, tender shoots and leaves.				
*ORNATE BOX TURTLE *Terrapene o. ornata* (Teoror)	Found in savannas, woodlands, sand hills and swamps.	13	59 65 70	CO NM(E) WY(SW)	
*DESERT BOX TURTLE *Terrapene o. luteola* (Teorlu)		7	42 43 44 31 58	AZ(SE) NM(S)	
Family TESTUDINIDAE					
Genus GOPHERUS					
DESERT TORTOISE *Gopherus agassizi* (Goag)	A land oriented species that inhabits desert oases, riverbanks, washes, dunes, and occasionally rocky slopes where creosote bush is a main part of the habitat. The diet is basically vegetarian, primarily annuals and grasses , but they are known to occasionally eat meat. Habitat destruction from agriculture is threatening this species, and it is protected under California state law. It is also threatened by collection for pets.	7 12	41 42 43	AZ(SW) CA(SE) NM NV(S) UT(SW)	Threatened (CA)
Family CHELONIIDAE					
Genus CARETTA					
LOGGERHEAD TURTLE *Caretta caretta* (Cacar)	Pacific coast from southern California to Chile. A confirmed wanderer, can be encountered in inland waters (small bays and streams), lagoons, estuaries and salt marshes and as far as 500 miles out to sea. Usually nests on a sloping sandy beach. The diet consists of various kinds of shell fish, mollusks, sponges, crabs, jellyfish, fish and eelgrass.	3	Marine	CA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*PACIFIC LOGGERHEAD *Caretta c. gigas* (Cacargi)	Found only in the vicinity of California on the coast of the continental United States.	3	Marine	CA	
Genus CHELONIA					
GREEN TURTLES *Chelonia mydas* (Chmy)	World wide in warm seas, common on the Pacific coast as far north as San Quentin Bay, Baja California. Found occasionally along coast of southern California. Most often found in shallow water, especially where there is submerged vegetation and places where the grassbeds are from two to four fathoms deep.	3	Marine	CA(S)	
**Chelonia m. agassizi* (Chmyag)					
PACIFIC GREEN TURTLE *Chelonia mydas agassizi* (Chag)	A basically vegetarian species with a tendency to include invertebrates in their diet.	3	Marine	CA(S)	
Genus LEPIDOCHELYS					
PACIFIC RIDLEYS *Lepidochelys olivacea* (Leol)	Reported only once on the Pacific coast of Humboldt County, California. A bottom sweller who frequents shallow protected waters of lagoons and bays. Its nest is made on the beach. Its diet is mainly seaweed, mollusks and sea urchins.	3	35 Marine	CA	
Family DERMOCHELIDAE					
Genus DERMOCHELYS - Leatherback					
LEATHERBACK TURTLE *Dermochelys coriacea* (Deco)	Found in the eastern Pacific from British Columbia to Chile. Usually seen far out at sea, but the females come to land to lay eggs.	1 3	Marine	CA(W) OR(W) WA(W)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family TRIONYCHIDAE					
Genus TRIONYX - Soft Shell Turtle					
TEXAS SOFTSHELL *Trionyx spiniferus emoryi* (Trspem)	Known chiefly as a river turtle in the west; can also be seen in ponds, ditches and canals. Showing a preference for quiet water with a mud, sand or gravel bottom. Makes its nest from May to July on a sandy bank. Diets on snails, insects, crayfish, earthworms, fish, frogs, tadpoles and aquatic plants.	7	23 32 41 42 58 59	AZ CA(SE) NV(S) UT(SW)	
WESTERN SPINY SOFTSHELL *Trionyx spiniferus hartwegi* (Trspha)	Its habitat and habits are similar to those of *Trionyx s. emoryi*, Texas softshell. Habitat destruction from pollution and pesticide usage may harm this subspecies, and it is protected under Colorado State law. The subspecies is rare in Montana, but is not protected there.	13 16	64 65 66 70	CO(E, peripheral) MT(C&E) WY(E)	Rare (MT)
SMOOTH SOFTSHELL *Trionyx muticus* (Trmu)	Found in the western United States in San Miguel County, New Mexico. A river turtle that frequents large rivers and streams but can be seen in lakes and impoundments. Usually builds its nest May to July on a muddy or sandy shore or on a small island.	13	71	NM(E)	

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Class REPTILIA
Order SQUAMATA
Suborder SAURIA - Lizards

		PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family EUBLEPHARIDAE - Ground Geckos					
Genus COLEONYX - American Ground Geckos					
BANDED GECKO *Coleonyx variegatus* (Cova)	Found in the dry parts of the Sonoran and Mojave Deserts, south and west of the Mongollon Rim. This gecko ranges from creosote bush flats to the pinyon-juniper belt. It is associated with catclaw, cedar, and gramma grass in the eastern part of its range, and ranges to chaparral areas in the West. Occasionally it is in desert-grassland. The barren Algodones Dunes, California, are also inhabited by this species. It is a nocturnal ground dweller, preferring rock crevices. Other shelters include small rodent burrows in sandy and gravelly soils, fallen yuccas, tin cans, boards, scattered stones, and other debris. Outcrops on canyon slopes and bottoms, with permanent or intermittent streams, are occupied. The diet includes many types of insects, primarily beetles and spiders. It hibernates from October to March. There are five subspecies in the West:	3 7 13	23 31 32 33 35 41 42 44 58 59	AZ CA NM NV UT	
*DESERT BANDED GECKO *Coleonyx v. variegatus* (Covava)		7	31 32 42 44 58	AZ(W) CA(SE) NV(S) UT(SW)	
*SAN DIEGO BANDED GECKO *Coleonyx v. abbotti* (Covaab)	This subspecies is found along the southern coast, as far north as the border of the Santa Barbara County.	3	33 35	CA(SW)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*TUCSON BANDED GECKO *Coleonyx v. bogerti* (Covabo)		7	31 42 44 58	AZ(SE) NM(SW)	
*UTAH BANDED GECKO *Coleonyx v utahensis* (Covaut)		7	23 41 58	AZ(NW) NV(S) UT(SW)	
*TEXAS BANDED GECKO *Coleonyn brevis* (Covabr)	This species is fairly well restricted to rocky or canyon areas, in arid environments.	7 13	23 58 59	NM(S & C)	
Family GEKKONIDAE - True Geckos Genus PHYLLODACTYLUS					
LEAF-TOED GECKO *Phyllodactylus xanti* (Phxa)	Inhabits arid and semiarid regions, including desert. It is typically an inhabitant of hillsides and canyons, occupying crevices in large boulders. Streams or springs are usually in the vicinity. In southern California the species occurs as far north as Riverside County. It is nocturnal. There is one western subspecies:	3 7	33 42	CA(S)	
*LEAF-TOED GECKO *Phyllodactylus x. noctiolus* (Phxano)		3 7	33 42	CA(S)	
Family IGUANIDAE - Iguanids Genus DIPSOSAURUS - Crested Lizards					
DESERT IGUANA *Dipsosaurus dorsalis* (Dido)	An inhabitant of the flat plains and valleys of the desert, this lizard is associated with creosote bush *(Larrea divaricata)*. Areas with loose sand and patches of firm ground and some rocks are preferred. It can be found in streambeds, on bajadas, on silty floodplains, and on clay soil. It is tolerant of high temperatures and forages in the branches of creosote and other plants. When not foraging, it basks on rocks, or retreats to a small rodent burrow near the base of a bush or cactus. Being primarily herbivorous, it feeds on leaves, buds, and flowers, but it will also eat insects. Breeding occurs in April and early May. There is one subspecies:	7	41 42	AZ CA NV UT	

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SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*DESERT IGUANA *Dipsosaurus d. dorsalis* (Didodo)		7	41 42	AZ(W) CA(SE) NV(S) UT(SW)	
Genus SAUROMALUS - Chuckwallas					
CHUCKWALLA *Sauromalus obesus* (Saob)	Occurs widely in the Sonoran and Mojave Deserts. It is associated with creosote bush. Crevices in boulders provide more permanent shelter, while scattered rocks may be used for temporary shelter while foraging during the day. The lizard may be found foraging on rocky hillsides and in old lava flows or basking on a boulder. It is herbivorous, feeding primarily on creosotebush. The tenderer parts of the desert plants--the leaves, flowers, and fruits--are preferred. There are three western subspecies:	7 12	39 41 42	AZ CA NV UT	
*WESTERN CHUCKWALLA *Sauromalus o. obesus* (Saobob)		7 12	41 42	AZ(W) CA(SE) NV(S) UT(extreme SW)	
*UPPER COLORADO RIVER CHUCKWALLA *Sauromalus o. multiforaminatus* (Saobmu)		12	39	AZ(N) UT(S)	
*ARIZONA CHUCKWALLA *Sauromalus o. tumidus* (Saobtu)		7	42	AZ(S)	
Genus HOLBROOKIA - Earless Lizards					
LESSER EARLESS LIZARD *Holbrookia maculata* (Homa)	Typically a grassland species. It can be found on shortgrass prairie, in bottomlands and washes, along sandy streambanks, on sand dunes (White Sands, NM) in mesquite woodland, or even on rocky hillsides and bajadas. Rodent burrows and scattered rocks are used for shelter. It feeds primarily on insects and spiders. There are six subspecies in the United States, five in the West:	7 12 13 14	27 31 44 53 58 59 65 70	AZ CO NM UT WY	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*NORTHERN EARLESS LIZARD *Holbrookia m. maculata* (Homama)	Typically in sandy soil, with low or sparse vegetation and little grass.	13 14	65 70	CO(E) NM(NE) WY(extreme SE)	
*SPECKLED EARLESS LIZARD *Holbrookia m. approximans* (Homaap)	Typically in open areas, away from canyons and boulders, in sandy or fine, gravelly soil.	7 13	44 53 58 59 65	NM(S & NC)	
*HUACHUCA EARLESS LIZARD *Holbrookia m. pulchra* (Homapu)	Restricted to the high grassland region of southeastern Arizona	7	44 58	AZ(SE)	
*COLORADO PLATEAU EARLESS LIZARD *Holbrookia m. campi* (Homaca)	Found on the Colorado Plateau.	7 12	53	AZ(NE) CO(SW) NM(NW) UT(SE)	
*WESTERN EARLESS LIZARD *Holbrookia m. elegans* (Homael)	Found in the Sonoran Desert, into desertscrub and thornscrub and in oak woodland and oak-grass habitat.	7	27 31 44 58	AZ(S)	
Genus COPHASAURUS - Earless Lizards					
GREATER EARLESS LIZARD *Cophasaurus texana* (Cote)	This lizard inhabits the area between the upper edge of the desert and the evergreen woodland, avoiding the extreme elevations. The associated vegetation includes creosote bush, mesquite, ocotillo, cactus, and paloverde. It is found on sandy to rocky soil in canyons, bajadas, desert flats, stream bottoms, and occasionally the sides of low hills. Open areas with sparse vegetation are preferred for running. The lizard is insectivorous. There are two western subspecies:	7 13	19 27 41 42 43 44 58 59	AZ NM	
*SOUTHWESTERN EARLESS LIZARD *Cophasaurus t. scitula* (Cotesc)		7	19 27 41 42 43 44 58	AZ(SE & C) NM(SC & SW)	
*TEXAS EARLESS LIZARD *Cophasaurus t. texana* (Cotete)		13	44 58 59	NM(SE)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Genus CALLISAURUS - Gridiron-tailed Lizards					
ZEBRA-TAILED LIZARD *Callisaurus draconoides* (Cadr)	Widely distributed in the Sonoran and Mojave Deserts. It inhabits most arid flat desert terrain, in valleys and plains. Loose sand in washes, arroyos, and the margins of dunes seem to be preferred, but the lizard is found on gravelly or hard terrain. Open areas are required for running. It is diurnal. Its diet includes insects, spiders, and occasionally other lizards. There are three western subspecies:	6 7	38 40 41 42 43	AZ CA NM NV UT	
*COLORADO DESERT ZEBRA-TAILED LIZARD *Callisaurus d. rhodosticus* (Cadrrh)		7	40 41 42	AZ(W) CA(SE) NV(S) UT(extreme SW)	
*NEVADA ZEBRA-TAILED LIZARD *Callisaurus d. myurus* (Cadrmy)		6	38 40	NV(C)	
*SONORA ZEBRA-TAILED LIZARD *Callisaurus d. ventralis* (Cadrve)		7	42 43	AZ(SC) NM(SW, Peripheral)	
Genus UMA - Fringe-toed Lizards					
FRINGE-TOED LIZARD *Uma notata* (Umno)	Restricted to areas of fine, windblown sand or very loose sand with low vegetation. Dunes, desert flats, riverbanks, and washes in arid desert are inhabited. The associated vegetation is creosote bush and other scrub, which is scattered. This lizard is insectivorous for the most part, but occasionally feeds on leaves and buds. There are three western subspecies:	7	41 42 43 46	AZ CA	
*COLORADO DESERT FRINGE-TOED LIZARD *Uma n. notata* (Umnono)	Found in the Colorado Desert of California.	7	42 43	CA(S)	
*COWLE'S FRINGE-TOED LIZARD *Uma n. rubopunctata* (Umnoru)	Found in the Sonoran Desert.	7	42 43 46	AZ(SW)	
				CA(S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*COACHELLA VALLEY FRINGE-TOED LIZARD *Uma n. inornata* (Umin)	Found in Coachella Valley, Riverside County, California.			CA(S)	
MOJAVE FRINGE-TOED LIZARD *Uma scoparia* (Umsc)	This lizard's habitat is similar to that of *Uma notata*. It is found in the Mojave Desert, California. It enters Arizona along Bouse Wash, southeast of Parker, Yuma County. In San Bernardino and Riverside Counties, CA.	7	41 42	AZ(W, peripheral) CA(SE)	
COLLARED LIZARD *Crotaphytus collaris* (Crco)	Inhabits desert and grassland, into evergreen woodland. Rocky arid regions, in canyons, gullies, mountain slopes, and alluvial fans with scattered boulders are preferred. It may also occur in open flat terrain, with rocks used for shelter. Vegetation is usually sparse. It needs open areas for running. Primarily carnivorous, but will take some plants. There are three subspecies in the United States, two in the West:	5 6 7 12 13 14	18 23 38 40 41 42 43 44 59 65	AZ CA CO NM NV OR UT	
*WESTERN COLLARED LIZARD *Crotaphytus c. baileyi* (Crcoba)		5 6 7 12 13 14	38 40 41 42 43 44 59 65	AZ CA(SE) CO(S) ID(S) NM NV OR(SE) UT	
*YELLOW-HEADED COLLARED LIZARD *Crotaphytus c. auriceps* (Crcoau)	Restricted to the upper Colorado and Green River Basins. This subspecies is protected by Colorado state law.	12	18 23 38	CO(W) UT(E)	Commercially exploited (CO)
LEOPARD LIZARD *Gambelia wislizeni* (Gawi)	This lizard inhabits a variety of areas in desert and arid to semiarid grasslands. It can be found from sand to rock and from essentially bare to densely covered shrub and tree habitats. Bunchgrass, alkali bush, sagebrush, creosote bush and other scattered low plants are included in a preferred area. Its chief prey are lizards, but it also feeds on insects (cicadas, crickets, and grasshoppers), spiders, rodents, and even seeds or blossoms. There are three western subspecies:	3 5 6 7 11 12 13	38 40 41 42 43 44 48 53 55 59	AZ CA CO ID NV UT	

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SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*LONG-NOSED LEOPARD LIZARD *Gambelia w. wislizeni* (Gawiwi)	Prefers loose soil, but found on hard alkali.	5 6 7 12 13	38 40 41 42 43 44 53 55 58 59	AZ CA CO(SW, peripheral) ID NM NV OR(SE) UT	
*BLUNT-NOSED LEOPARD LIZARD *Gambelia w. silus* (Gawisi)	Restricted to the San Joaquin Valley and the surrounding foothills. It can be found in abandoned kangaroo rat burrows, and it feeds on grasshoppers. Habitat destruction through agricultural land usage, road building, lumber operations, mining and industrial land use has endangered this subspecies. It is protected by California state and federal laws.	3	40 48	CA	ENDANGERED (CA, USA)
*PALE LEOPARD LIZARD *Gambelia w. punctatus* (Gawipu)	Found in the upper Colorado River Basin.	11 12	38 40	AZ(N) CO(W) NM(NW) UT(S)	
Genus SCELOPORUS - Spiny Lizards					
BUNCH GRASS LIZARD *Sceloporus scalaris* (Scsc)	Found in the coniferous woodlands of the Santa Rita, Dragoon, Huachuca, and Chiricahua Mountains of Arizona, and the Animas Mountains of New Mexico. It also has been taken in desert-grassland. It is a ground dweller, staying in clumps of bunchgrass, usually in open sunny patches on south-facing slopes of the coniferous woodlands. It also may be found under rocks, logs, or slabs of bark in the same area. Late mornings of warm, bright days are the periods of most activity. It is active during summer rain periods. The diet includes insects and spiders. There is one western subspecies:	7	19 31 58	AZ NM	
*BUNCH GRASS LIZARD *Sceloporus s. slevini* (Scsasl)	This lizard is found associated with bunchgrasses, in which it takes refuge. This species may be vulnerable to overgrazing in its restricted range. It is protected by New Mexico State Law.	7	19 31 58	AZ(SE) NM(SW, peripheral)	Threatened (N.M)

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
MOUNTAIN SPINY LIZARD (Yarrow's Spiny Lizard) *Sceloporus jarrovi* (Scja)	Inhabits the forested oak and conifer belts in the Baboquivari, Santa Rita, Dragoon, Huachuca, Chiricahua, and Pinaleno (Graham) Mountains. Rocky habitats are preferred. It can be found on rock ledges of cliffs, on talus slopes, in rock crevices in the vicinity of streams, in canyon pools, in damp sand, on trees or fallen logs, or under debris. It is often seen perched on boulders. The diet consists of insects and spiders. It is live-bearing. There is one western subspecies:	7	19 31	AZ(SE) NM(SW)	
*MOUNTAIN SPINY LIZARD *Sceloporus j. jarrovi* (Scjaja)		7	19 31	AZ(SE) NM(SW)	
CREVICE SPINY LIZARD *Sceloporus poinsetti* (Scpo)	Found in arid and semiarid, rocky regions. It inhabits limestone bluffs, granite areas, lava flows, rocky canyons, gullies, and hillsides. It retreats into rock crevices. The diet consists mainly of insects, but occasionally includes buds and leaves.	7	18 23 44 58	NM(S)	
DESERT SPINY LIZARD *Sceloporus magister* (Scma)	This lizard is widely distributed in the Sonoran and Mojave Deserts and the desert-grassland. It can be found on the lower slopes of mountains, primarily among rocks and bushes. The associated vegetation includes joshua tree, creosote bush, shadscale, juniper and mesquite woodland, and willows and cottonwoods along streams. It takes refuge in dense clumps of vegetation, in crevices, under logs, rocks, and debris, in woodrat nests, and in rodent burrows. It tends to be a ground dweller, but is a good climber. The diet consists of insects (ants), lizards, and occasionally leaves and buds. There are five western subspecies:	6 7 12	23 27 31 32 39 40 41 42 43 58	AZ CA CO NM NV UT	
*DESERT SPINY LIZARD *Sceloporus m. maqister* (Scmama)		7	27 32 42 43 58	AZ(SC & SW)	
*TWIN-SPOTTED SPINY LIZARD *Sceloporus m. bimaculosus* (Scmabi)		7	23 31 44 58 59	AZ(SE) NM	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*BARRED SPINY LIZARD *Sceloporus m. transversus* (Scmatr)	Found from Inyo and Kern Counties, California, to Mineral and Esmeralda Counties, Nevada.	6	23 40 41	CA NV	
*YELLOW-BACKED SPINY LIZARD *Sceloporus m. uniformis* (Scmaun)		6 7 12	23 40 41 58	AZ(N & C) CA NV UT(SW)	
*ORANGE-HEADED SPINY LIZARD *Sceloporus m. cephaloflavus* (Scmace)		12	23 39 40	AZ(NE) CO(extreme SW) NM(NW) UT(SE)	
CLARK'S SPINY LIZARD *Sceloporus clarki* (Sccl)	Inhabits primarily pine-oak woodland on the lower mountain slopes, preferring riparian situations. It also may be found along major drainage ways without trees in the upper edge of the Sonoran Desert, and in the desert-grassland. It is primarily a tree climber, but also is found on the ground, usually among rocks. The diet consists of insects and occasionally leaves, buds, and flowers. There are two western subspecies:	7 12	19 31 32	AZ NM	
*SONORA SPINY LIZARD *Sceloporus c. clarki* (Scclcl)		7	19 31 32	AZ(SE) NM(SW)	
*PLATEAU SPINY LIZARD *Sceloporus c. vallaris* (Scclva)	Restricted to the edge of the Colorado Plateau.	7 12	19 31 32	AZ	
GRANITE SPINY LIZARD *Sceloporus orcutti* (Score)	Inhabits granite outcrops in chapparal, oak woodland and yellow pine forest on the western face of the coastal range. On the desert side it inhabits rocky canyon and rocky portions of alluvial fans in the vicinity of chaparral, palms or mesquite. It is found in pinyon-juniper woodland in Baja California. It is an excellent climber, and is most likely to be found around large, abundant boulders. The diet consists of insects, other lizards, and occasionally buds and fruits. There is one subspecies:	3	23 30 33	CA	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*GRANITE SPINY LIZARD *Sceloporus o. orcutti* (Scorcor)		3	23 30 33	CA(S)	
WESTERN FENCE LIZARD *Sceloporus occidentalis* (Scoc)	("Swift," "Bluebelly") Found in many different habitats except for extreme desert areas. It seems to prefer rocky wooded regions. It most likely will be found around fences, wood or rock piles, logs, buildings, the brush-heap of the wood-rat (*Neotoma*), or roadside banks with abandoned gopher (*Thamomys*) holes. Its diet consists of insects and spiders. There are six western subspecies:				
*NORTHWESTERN FENCE LIZARD *Sceloporus o. occidentalis* (Scococ)	Found in the less humid parts of the coastal forest.	1 2 3 4	2 6 28 29 30	CA OR WA	
*SAN JOAQUIN FENCE LIZARD *Sceloporus o. biseriatus* (Scocbi)	Restricted to the lower San Joaquin Valley.	3	48	CA	
*SIERRA FENCE LIZARD *Sceloporus o. taylori* (Scocta)	Restricted to the Sierra Nevadas.	4	5	CA	
*ISLAND FENCE LIZARD *Sceloporus o. becki* (Scocbe)	Restricted to Santa Cruz, Santa Rosa, and San Miguel Islands, California. It is usually found on the ground under bushes or clumps of cactus, on banks of earth, or on rocks, being most abundant along the creekbed on Santa Cruz Island.	3	33 35	CA	
*COAST RANGE FENCE LIZARD *Sceloporus o. bocourti* (Scocbo)	Ranges south of San Francisco Bay as far as Santa Barbara County.	3	30 33 48	CA	
*GREAT BASIN FENCE LIZARD *Sceloporus o. longipes* (Scoclo)		3 5 6 8	33 35 38 40 48	CA ID(SW) NV OR(E) UT WA(SE)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
EASTERN FENCE LIZARD *Sceloporus undulatus* (Scun)	Found in many habitat types. It inhabits brushy desert-grassland, sand dunes, prairie, woodland, and even coniferous forest. It may range from flat, sandy ground to rocky hillsides. It climbs trees in the forest, and rocks on the flatlands. Refuge is sought in bushes, yuccas, trees, logs, rodent burrows, and under rocks and other objects. It is active all year in the south. Its diet includes insects, spiders, millipedes, snails and other small animals. There are nine subspecies in the United States, six in the West:	7 11 12 13 14	18 19 20 21 23 32 40 53 58 59 65 70	AZ CO NM UT WY	
*NORTHERN PLATEAU LIZARD *Sceloporus u. elongatus* (Scunel)	Typically an inhabitant of canyon walls and boulder-strewn hillsides.	11 12	20 21 23 39 40 57	AZ(NE) CO(W) NM(NW) UT(E) WY(SW)	
*SOUTHERN PLATEAU LIZARD *Sceloporus u. tristichus* (Scuntr)	Characteristic of pinyon-juniper association. Frequents rocky places.	7 11 12	18 19 21 23 32 53	AZ(NE) NM(NW) UT(SE)	
*SOUTHERN PRAIRIE LIZARD *Sceloporus u. consobrinus* (Scunco)	Typically on the plains, but also in the mountains.	7 13	23 58 59 65	AZ(SE) NM(S)	
*RED-LIPPED PLATEAU LIZARD (Eastern Plateau Lizard) *Sceloporus u. erythrocheilus* (Scuner)		11 13	18 21 40 65	CO NM(NE) WY(SE)	
*NORTHERN PRAIRIE LIZARD *Sceloporus u. garmani* (Scunga)	Found in sand dunes, sandy areas near bushes, under stalks of wheat on the prairie, and other habitats. Diet is grasshoppers and beetles.	13 14	65 70	CO(E) WY(SE)	
*COWLES PRAIRIE LIZARD (White Sands Fence Lizard) *Sceloporus u. cowlesi* (Scuncow)	Found only in the White Sands National Monument	7	58	NM(SC)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
STRIPED PLATEAU LIZARD *Sceloporus virgatus* (Scvi)	Found in the Chiracahua and neighboring mountains of southern Arizona and New Mexico. It inhabits mixed pine-oak woodland, and does not overlap with the range of the Eastern Fence Lizard of the lowlands. The Striped Plateau Lizard may be found on canyon bottoms, in the vicinity of rocky or sandy intermittent streams or drainage channels. It climbs boulders, logs, and even trees. The diet includes insects, centipedes, and other arthropods.	7	31	AZ(SE, peripheral) NM(SW)	
SAGEBRUSH LIZARD *Sceloporus graciosus* (Scgra)	Inhabits desert floors as well as mountain slopes. It favors the sagebrush (*Artemisia tridentata*) association, but also occurs in manzanita and ceanothus brushland, in shrubby openings in pinyon-juniper woodland and yellow pine-fir forest, and along river bottoms in coastal redwood forest. It typically can be found in a well lighted area with scattered low bushes, on preferably fine, gravelly soil. It may be near a bush, log, rock crevice, or rodent burrow. The diet of this lizard includes insects, spiders, mites, ticks, scorpions and snails. There are four western subspecies:	1 2 3 4 5 6 7 8 9 10 11 12 13 16	6 10 18 20 23 30 33 35 38 40 41 42 55	All	
*NORTHERN SAGEBRUSH LIZARD *Sceloporus g. graciosus* (Scgragr)	Characteristic of the Great Basin region. Eggs are laid early July, hatching in mid August.	1-13 16	6 10 18 20 23 30 38 40 41 42 55	All	
*SOUTHERN SAGEBRUSH LIZARD *Sceloporus g. vandenburgianus* (Scgrava)		3 7	30 33 35 41 42	CA	
*NORTHWESTERN SAGEBRUSH LIZARD *Sceloporus g. gracilis* (Scgragra)	In the Sierra Nevadas and the coast range. Seems to prefer dry, open areas.	3 4		CA	
*DUNES SAGEBRUSH LIZARD *Sceloporus g. arenicolorus* (Segraar)	Protected by New Mexico state law.			NM(peripheral)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Genus UTA - Ground Utas					
SIDE-BLOTCHED LIZARD *Uta stansburiana* (Utst)	Inhabits arid and semiarid regions, in open, flat sandy desert and grassland, on bajadas, or on rocky hillsides. The habitat can be rock, sand, loam, or even hardpan, with vegetation of grass, bushes, and scattered trees. The lizard usually can be found under shrubs or rocks, in rodent burrows, or in wood rat nests. It is active all year in the south. Its diet includes insects, scorpions, spiders, mites, ticks, and sowbugs. There are three western subspecies:	3 5 6 7 10 12 13	33 35 38 39 40 41 42 43 44 48 53 55 57 58 59 65	AZ CA CO ID NM NV OR UT WA WY	
*CALIFORNIA SIDE-BLOTCHED LIZARD *Uta s. hesperis* (Utsthe)	On the coastal region of California.	3	33 35 48	CA(W)	
*DESERT SIDE-BLOTCHED LIZARD *Uta s. stejnegeri* (Utstst)	Occurs on fine or gravelly desert soil, or on boulders.	7 12 13	41 42 43 44 53 58 59 65	AZ CA(SE) NM NV(S) UT(SW)	
*NORTHERN SIDE-BLOTCHED LIZARD *Uta s. stansburiana* (Utstst)	Usually coarse, gravelly soil.	5 6 10 12	38 39 40 55 57	AZ(N) CA(E) CO(W) ID(S) NM(NW) NV OR(E) UT WY(SE) WA(SC)	
Genus UROSAURUS - Climbing Utas					
LONG-TAILED BRUSH LIZARD *Urosaurus graciosus* (Urgr)	Found in the Sonoran and Mojave Deserts, in loose sand, with scattered bushes and trees. The associated vegetation includes creosote bush, burrow bush, galleta grass, catclaw, mesquite, and paloverde. Even though it spends some time hunting on the ground, it is never far from the arboreal habitat. It typically seeks refuge in the exposed root tangle of certain creosote bush and at night in the sand or rodent burrows. It thrives in olive trees and Washington palms in Palm Springs, California. Its diet consists of insects, spiders, and occasionally plant matter. There are two subspecies:	7	27 41 42 43	AZ CA NM NV	

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SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*WESTERN BRUSH LIZARD *Urosaurus g. graciosus* (Urgrgr)		7	41 42 43	AZ(W) CA(SE) NV(S)	
*ARIZONA BRUSH LIZARD *Urosaurus g. shannoni* (Urgrsh)		7	27 43	AZ(SC)	
TREE LIZARD *Urosaurus ornatus* (Uror)	Widely distributed from near the banks of the Colorado River into coniferous forest in several mountains. The associated vegetation includes mesquite, oak, pine, juniper, alder, cottonwood, tamarisk, and rough-bark eucalyptus (non-native). It appears to favor riparian situations. It is a climbing species, usually found sitting or climbing on large rocks and boulders, and sometimes clinging head downward in trees and shrubs. Rarely is it seen for more than a moment on the ground. There are five western subspecies:	7 12	19 20 23 27 31 32 42 43 53 58 59	AZ CA CO NM NV UT WY	
*SMOOTH TREE LIZARD *Urosaurus o. levis* (Urorle)	Restricted habitat.			NM(NC)	
*LINED TREE LIZARD *Urosaurus o. linearis* (Urorli)	Diet includes flies, beetles, centipedes, and other arthropods.			AZ(C&SE) NM(C, S, & SW)	
*BIG BEND TREE LIZARD *Urosaurus o. schmidti* (Urorsc)				NM(extreme SE)	
*COLORADO RIVER TREE LIZARD *Urosaurus o. symmetrica* (Urorsy)	Almost exclusively on boulders.			AZ(S&W) CA(extreme SE) NV(extreme SE)	
*NORTHERN TREE LIZARD *Urosaurus o. wrighti* (Urorwr)	Highly restricted to boulders, canyon walls, and cliffs. Its diet includes insects and arthropods.			AZ(N) CO(W) NM(NW) UT(E & C) WY(SW)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
SMALL-SCALED LIZARD *Urosaurus microscutatus* (Urmi)	Found in Borrego Palm Canyon on the desert side of the mountains, and in Cottonwood and Deerhorn Flat on the coastal side. It is found in rocky habitats. The associated vegetation includes chaparral, desert willow, sycamore, and oak. It takes refuge among rocks, and in the trunks and branches of trees, along permanent or intermittent streams. The diet consists of insects and spiders.	3	30 33	CA	
BANDED ROCK LIZARD *Petrasaurus mearnsi* (Peme)	Found from the San Gorgonio Pass, southward on the desert side of the mountains. It crawls on boulders in the shady narrower parts of canyons. This lizard is diurnal. Its diet consists of insects, spiders, and occasionally blossoms and buds.	3 7	42	CA(S)	
Genus PHRYNOSOMA - Horned Lizards					
TEXAS HORNED LIZARD *Phrynosoma cornutum* (Phcor)	Found in arid and semiarid open country - Chihuahuan Desert and desert-grassland. Sandy or gravelly flat ground with or without rocks is preferred, usually with scattered desert and grassland shrubs. The associated vegetation includes bunchgrass, cactus, juniper, acacia, and mesquite. The lizard is diurnal, and takes refuge under loose soil, under bushes, in rodent burrows, or among rocks. Hibernation occurs between September or early October to April or early May. Mating occurs in April and May and eggs are laid in May and June. The diet consists mainly of ants, but includes other insects and arthropods. It will eat only during warm temperatures.	7 13	23 31 53 58 65	AZ(SE, extreme) CO(SE) NM	
COAST HORNED LIZARD *Phrynosoma coronatum* (Phco)	This species is typically associated with brushland, coniferous forest, and broadleaf woodland. It inhabits valleys, mesas, and foothills with scattered low shrubs. It uses bushes for cover, or buries itself in loose sand. The diet consists of ants and other insects. There are two western subspecies:				
*SAN DIEGO HORNED LIZARD *Phrynosoma c. blainvillei* (Phcobl)	Found on the coast, from about San Diego southward. Habitat destruction from agricultural land usage and road building is threatening this lizard. It is protected under California state law.	3	23 33 35 36 48	CA(SW)	Threatened (CA)

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*CALIFORNIA HORNED LIZARD *Phrynosoma c. frontale* (Phcrfr)	Found in the coastal region from San Diego northward.	3	30 33 48	CA(W)	
DESERT HORNED LIZARD *Phrynosoma platyrhinos* (Phpl)	Found in the Sonoran and Mojave Deserts, this species occurs on a wide range of desert soils from loose fine sand to gravel and rocky strata. It is usually in an area of considerable shrub cover. The associated vegetation includes creosote bush, saltbush, cactus, and ocotillo in the desert, and basin sagebrush in the Great Basin. There are two western subspecies:				
*NORTHERN DESERT HORNED LIZARD *Phrynosoma p. platyrhinos* (Phplpl)		5 6 9 12	38 40 41	CA(NE) ID(SW) NV OR(SE) UT(W)	
*SOUTHERN DESERT HORNED LIZARD *Phrynosoma p. calidiarum* (Phplca)		7 12	41 42 43	AZ(W) CA(SE) NV(S) UT(S)	
SHORT-HORNED LIZARD *Phrynosoma douglassi* (Phdo)	Has a variety of habitats. It ranges from flat, semiarid grassland plains to mountain hillsides and valleys. The associated vegetation includes shortgrass prairie sagebrush, pinyon-juniper, pine-spruce, and spruce-fir. Usually the lizard is in the vicinity of fine, loose soil, but rocks or gravel may be in the area. It tolerates cold better than other horned lizards. In Colorado, destruction of its habitats is occurring due to urbanization, road building, and pollution. There are four western subspecies:				
*PYGMY HORNED LIZARD *Phrynosoma d. douglassi* (Phdodo)	Found on the open plains.	5	55	CA(NE) ID(S) NV(N, extreme) OR(W) WA(W)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*NORTHERN SHORT-HORNED LIZARD *Phrynosoma d. brevirostre* (Phdobr)	Found on semiarid plains, usually in fairly rough terrain.	8 9 10 13-16	12 16 17 55 64 65 66	CO MT UT(NE) WY	
*SALT LAKE HORNED LIZARD *Phrynosoma d. ornatum* (Phdoor)	Found in semiarid alkali flats among Russian thistle, shadscale, sagebrush, and greasewood. It feeds mostly on ants.	5 6 9	12 20 23 38	ID(SE) NV(E) UT	
*MOUNTAIN SHORT-HORNED LIZARD *Phrynosoma d.* (Phdohe) *hernandesi*	Found on the mountains and plateaus, associated with pinyon-cedar and pine-spruce.	7 12	19 20 23 31 32 38 53	AZ CO(W) NM(W) UT(SE)	
FLAT-TAILED HORNED LIZARD *Phrynosoma m'calli* (Phmc)	Has a restricted range in the extremely barren country of the lower Sonoran Desert. It inhabits only fine, sandy soils, in which it quickly burrows for protection. Scant vegetation may or may not be in the vicinity. Peak activity is in the morning before the sand gets hot, and during the evening in the summer.	7	42 43 46	CA(SE) AZ(SW, extreme)	
ROUND-TAILED HORNED LIZARD *Phrynosoma modestum* (Phmo)	Found in desert and desert-grassland, on sandy or gravelly soil with or without rocks, usually with scattered desert shrubs. The associated vegetation may be cedar, ocotillo, oak, mesquite, creosote bush, or sumac. The lizard is most active in the early morning on overcast days. Its diet consists largely of ants and beetles.	7 13	27 31 42 44 58	AZ(SE) NM	
REGAL HORNED LIZARD *Phrynosoma solare* (Phso)	Found in the southcentral area of the Arizona upland region of the Sonoran Desert, and along the western edge of the desert-grassland. It inhabits rocky and gravelly bajadas, arid plains, and desert foothills, rarely on sandy flats. The associated vegetation may be cactus, mesquite, creosote bush, and greasewood. The lizard may be found under a plant.	7	27 42 43	AZ(S&C)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family XANTUSIIDAE - Plate-bellied Night Lizards					
Genus XANTUSIA - Night Lizards					
GRANITE NIGHT LIZARD *Xantusia henshawi* (Xahe)	Found from the southern side of San Gorgonio Pass southward on both desert and coastal mountains. It inhabits rocky canyons and hillsides, usually on massive outcrops or granite boulders in the shadier areas. It takes refuge in the rock crevices, seldom coming out at night. Its diet includes insects, spiders, ticks, scorpions, centipedes, and occasionally plant matter.	3	33 42	CA(S)	
DESERT NIGHT LIZARD *Xantusia vigilis* (Xavi)	Found in the arid lands in and around the Mojave Desert. The associated vegetation includes joshua tree, Spanish dagger, Mojave yucca, nolina, agave, cardons, pinyon-juniper, and Digger pine. The lizard most likely will be found under fallen and rotting joshua tree trunks, Spanish dagger, the bark of Digger pine, or in burrows under bushes. It is primarily diurnal and crepuscular, but may be nocturnal during warm summer months. Its diet includes insects, spiders, and other arthropods. There are two subspecies in the United States:				
*DESERT NIGHT LIZARD *X. v. vigilis* (Xavivi)		7	23 41 42 43	AZ(W) CA(S) NV(S) UT(SW)	
*UTAH NIGHT LIZARD *X. v. utahensis* (Xaviut)	Restricted to the Henry Mountains in Garfield County.	12	39 40	UT(SE)	
ARIZONA NIGHT LIZARD *Xantusia arizonae* (Xaar)	Restricted to upper desert and lower woodland habitats along the southwestern edge of the Colorado Plateau, in the Weaver, McCloud, and Superstition Mountains. The associated vegetation includes oak, chaparral, yucca, and other mixed desert and woodland vegetation. The lizard can be found under cap flakes of massive granite boulders, in rock crevices, and occasionally under yucca logs and branches in the vicinity of boulders. Its diet includes weevils and other beetles, ants and bugs.	7	32 58	AZ(C)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
ISLAND NIGHT LIZARD *Klauberina riversiana* (Klri)	Found on San Clemente, Santa Barbara, and San Nicholas Islands off the coast of southern California. It inhabits grassland, cliffs, and rocky beaches, and may be found under clumps of cactus, rocks, driftwood, and fallen branches. It may be seen during the day. The diet includes insects, spiders, centipedes, scorpions, marine isopods, and the stems, leaves, buds, and seeds of plants.	3	33 35	CA(S)	
Family SCINCIDAE - Skinks					
Genus EUMECES - Opaque-lidded Skinks					
GREAT PLAINS SKINK *Eumeces obsoletus* (Euob)	Found from the desert-grassland into the woodlands. It inhabits semiarid canyons, mesas, mountains, and desert in the vicinity of permanent and intermittent streams or arroyos. Grass and low shrubby growth is usually in the area. The lizard can be found under large boulders and rocks, in crevices, under logs and bark, under boards, in litter, in bushes, or in burrows. It is diurnal, and quite vicious. Its diet includes insects, insect eggs, insect larvae, spiders, and sometimes small lizards.	7 11 12 13 14	18 19 23 53 58 65	AZ CO(E) NM WY(extreme SE)	
MANY-LINED SKINK *Eumeces multivirgatus* (Eumu)	Found in a variety of habitats, from shortgrass prairie into the mountains. The associated vegetation ranges from creosote bush to possibly pine and spruce. The lizard can be found in creosote bush desert, plains, canyon bottoms, and hillsides in woodland and forest. It even is found in vacant lots, city dumps, and backyards. The ground may be loamy, sandy, or rocky. It prefers water or moist subsoil in the area. Under rocks, logs, boards, and dried cow chips are hiding places. It is primarily insectivorous. There are two western subspecies:				
*NORTHERN MANY-LINED SKINK *Eumeces m. multivirgatus* (Eumumu)		11 13 14	18 65 70 75	CO(E) WY(SE)	
*TWO-LINED SKINK (Southern Many-lined Skink) *Eumeces m. epipleurotus* (Eumuep)		7 11 12 13	18 19 20 23 38 53	AZ CO(SW) NM UT(SE)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
MOUNTAIN SKINK *Eumeces callicephalus* (Eucal)	A Mexican species, ranging into the Baboquivari, Pajarito, Santa Rita, and Huachuca Mountains of southeastern Arizona and southwestern New Mexico. It inhabits oak and pine woodland and forest, under and among rocks, rock fragments, and logs in canyon bottoms and on hillsides. Its diet consists of insects and spiders.	7	19 31	AZ(SE) NM(SW, peripheral)	
WESTERN SKINK *Eumeces skiltonianus* (Eusk)	Found in grassland, woodland, and forest, with enough rainfall to support dense vegetation. The associated vegetation includes ponderosa pine, fir, broadleaf deciduous trees, and grasses. The lizard inhabits rocky streamside habitats, dry, somewhat grassy hillsides, sunny clearings in forest, and in treeless meadows. It can be found under rocks, leaves, logs, and bark. It is diurnal, but quite secretive. Its diet includes moths, beetles, crickets, grasshoppers, spiders, and sowbugs. There are three western subspecies:				
*WESTERN SKINK *Eumeces s. skiltonianus* (Eusksk)		1-5 8	2-6 10-14 30 36 48	CA ID(N) MT(W) NV(NW) OR WA(E)	
*GREAT BASIN SKINK *Eumeces s. utahensis* (Euskut)	Associated with scrub oak, sagebrush, juniper, and grass.	5 6 8 9 12	23 37 38 55	AZ(N) ID(S) MT(SW, peripheral) NV UT(W)	
*CORONADO ISLAND SKINK *Eumeces s. interparietalis* (Euskin)		3	30 33 35	CA(S)	
GILBERT'S SKINK *Eumeces gilberti* (Eugi)	Found near the banks of permanent or intermittent streams, in desert, grassland, chaparral, woodland, and forest. The associated vegetation includes grasses, cottonwood, willow, pinyon, juniper, chaparral-oak, mesquite, and yellow pine. It is typically found among rocks, logs, and leaf litter. Its diet includes insects and spiders. There are five western subspecies:				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*GREATER BROWN SKINK *Eumeces g. gilberti* (Eugigi)	Occurs in the northern Sierra Nevadas near Yosemite Valley.	3 4	5 30 33	CA	
*NORTHERN BROWN SKINK *Eumeces g. placerensis* (Eugipl)	Found in the foothills of the Sierra Nevadas and the San Joaquin Valley, in Yuba, Nevada, Placer, Sacramento, Eldorado, Amador, and San Joaquin Counties.	3 4	5 30 33	CA	
*VARIEGATED SKINK *Eumeces g. cancellosus* (Eugiru)	Restricted to eastern Contra Costa, eastern Alameda, southwest San Joaquin, and northwest Merced Counties.	3	30 48 49	CA	
*WESTERN RED-TAILED SKINK *Eumeces g. rubricaudatus* (Eugiru)	Isolated populations in California at Covington Flat, Riverside County; Deep Springs and Saline Valleys, Inyo County; and in Panamint, Kingston, Clark, and Providence Mountains. In Nevada at Sheep and Charleston Mountains and at Grapevine Peak.	3 4 7	23 33 41 48	CA NV(S)	
*ARIZONA SKINK *Eumeces g. arizonensis* (Eugiar)	Isolated populations in Yavapai and Maricopa Counties, Ariz. In pinyon-juniper woodland and yellow pine forest in the vicinity of Prescott and Bradshaw Mountains; in chaparral-oak at Yarnell; and in the cottonwood, willow, and mesquite bottomlands of Hassayampa River near Wickenburg.	7 12	19 23	AZ	
Family TEIIDAE - Whiptails and Race Runners Genus CNEMIDOPHORUS - Whiptails and Race Runners					
ORANGE-THROATED WHIPTAIL *Cnemidophorus hyperythrus* (Cnhy)	Found in brush, arid coastal regions, primarily chaparral. It inhabits washes and other areas of sand, loose soil, rocks, and patches of brush. There is one western subspecies:				
*ORANGE-THROATED WHIPTAIL *Cnemidophorus h. beldingi* (Cnhybe)	Distributed throughout the Peninsular Range from Riverside southward. This subspecies is threatened from destruction of its habitat by agricultural land usage, urbanization, road building, etc. It is protected by California state law.	3	33 35	CA(SW)	Threatened (CA)
GIANT SPOTTED WHIPTAIL *Cnemidophorus burti* (Cnbu)	Found in extreme southeastern Arizona and in the Santa Catalina, Ajo, Puerto Blanco, Baboquivari, and Pajarito Mountains and the vicinity of Oracle and Mineral Hot Springs. Also in extreme southwestern New Mexico. It inhabits mountain canyons,				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	arroyos, and mesas in the desert, desert-grassland, and evergreen woodland. It is typically among dense shrubby vegetation and rocks, along the banks of permanent and intermittent streams. There are two western subspecies:				
*RED-BACKED WHIPTAIL *Cnemidophorus b. xanthonotus* (Cnbuxa)	Occurs in juniper-oak and desert-edge habitat in the Ajo, Dripping Springs, and Puerto Blanco Mountains, Organ Pipe National Monument, Pima County, Arizona.	7	31 42 43	AZ(S)	
*GIANT SPOTTED WHIPTAIL *Cnemidophorus b. stictogrammus* (Cnbust)	This whiptail is protected by New Mexico state law.	7	31 44 58	AZ(SE) NM(SW, peripheral)	
NEW MEXICAN WHIPTAIL *Cnemidophorus neomexicanus* (Cnne)	Found in arid and semiarid lowlands of the Rio Grande Valley of New Mexico, and isolated in scattered localities west to Lordsburg, New Mexico. It inhabits primarily sandy alluvia and the margins of desert playas. The associated vegetation includes low grass, saltbush, desert tea, yucca, and mesquite.	7	44 58	NM	
LITTLE STRIPED WHIPTAIL *Cnemidophorus inornatus* (Cnin)	Found in open, shortgrass habitats in the desert-grassland with little or no yucca or mesquite present. Summer annuals are usually present and often abundant. It ranges into the grassy areas of the pinyon-juniper zone. It frequents sandy, silty, or gravelly terrain, in elevated plains or alluvial flatlands.	7	23 53 58	AZ(SE) NM	
DESERT-GRASSLAND WHIPTAIL *Cnemidophorus uniparens* (Cnun)	Primarily a species of the lowlands, inhabiting desert and mesquite areas. It also is found along rivers into the mountains. The associated vegetation includes mesquite, yucca, grasses and herbs, and even in evergreen woodland.	7 12	19 27 31 44 58	AZ (C & SE) NM(SW)	
PLATEAU WHIPTAIL *Cnemidophorus velox* (Cnve)	Most common in the mountains. The associated vegetation includes pinyon-juniper, oak, and ponderosa pine. It prefers the lower mountain elevations along permanent and intermittent streams.	7 12	18 19 23 32	AZ(NE) CO(SW) NM(NW) UT(SE)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
SIX-LINED RACE RUNNER *Cnemidophorus sexlineatus* (Cnse)	Found in dry regions, preferring a loose porous soil in open grassland with scattered bushes or sparse woods. It inhabits the lowlands and hills, the floodplains and banks of rivers and in the vicinity of rock outcrops. It is diurnal, emerging usually on warmer days. It hibernates in the fall, emerging in April. The diet includes grasshoppers, crickets, spiders, ants, flies, small moths, and moth or butterfly larvae. Eggs are laid in early June to mid July. The young hatch in early August. There are two subspecies in the United States, one in the west:				
*PRAIRIE LINED RACE RUNNER *Cnemidophorus s. viridis* (Cnsevi)		13	65 70	CO(E) NM(E) WY(SE)	
CHIHUAHUA WHIPTAIL *Cnemidophorus exsanguis* (Cnex)	Ranges from the desert and desert-grassland into the oak-pine and ponderosa pine forest in the mountains. It inhabits rocky hillsides, the sandy alluvium of washes, and most typically in the canyon bottoms.	7 12	18 19 23 31 58	AZ NM	
TEXAS SPOTTED WHIPTAIL *Cnemidophorus gularis* (Cngu)	Found in arid and semiarid prairie grassland, in washes, river bottoms, and along streams. The associated vegetation includes mesquite, acacia, cactus, and brush. It avoids regions broken by boulders and rocks.	13	59	NM(SE)	
WESTERN WHIPTAIL *Cnemidophorus tigris* (Cnti)	Found in arid and semiarid habitats, ranging from desert to pine forest in the mountains. It avoids dense vegetation, preferring sandy plains, rocky desert, semiarid grasslands, pinyon-juniper woodland, and warmer parts of the forest, in streamside communities. There are six western subspecies:				
*GREAT BASIN WHIPTAIL *Cnemidophorus t. tigris* (Cntiti)		5 6 7 12	11 20 23 38 40 41 42 55	AZ(W) CA ID NV OR(E) UT	
*CALIFORNIA WHIPTAIL *Cnemidophorus t. mundus* (Cntimu)	Found from the region of Point Conception to the region of Lassen Peak.	3	30 33 48	CA(W&C)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*COASTAL WHIPTAIL *Cnemidophorus t. multicutatus* (Cntimu)		3	33 35	CA(SW)	
*SOUTHERN WHIPTAIL *Cnemidophorus t. gracilis* (Cntigr)		7	31 42 43 58	AZ(SE & C) NM(SW)	
*NORTHERN WHIPTAIL *Cnemidophorus t. septentrionalis* (Cntise)		12	23 38 40 53	AZ(N) CO(W) NM(NW) UT(S)	
*MARBLED WHIPTAIL *Cnemidophorus t. marmoratus* (Cntima)		7 13	23 58 59	NM(S)	
ARIZONA WHIPTAIL *Cnemidophorus arizonae* (Cnar)	Found in the grassland and Chihuahuan Desert habitats; also in evergreen woodland. It typically inhabits plains and gentle foothill slopes, occasionally in areas with scant cover (grasses and herbs with or without a few scattered shrubs), but more commonly where mesquite and yucca are present, and often abundant where mesquite is dense on much-deteriorated grassland.	7	19 27 31 58	AZ(SE)	
CHECKERED WHIPTAIL *Cnemidophorus tesselatus* (Cnte)	Found typically in open, rocky to sandy habitats with scant vegetation in arid regions. The soil may be hard-packed. The associated vegetation ranges from creosote bush to pinyon-juniper. Rocky hillsides and canyons are inhabited if flat areas are interspaced.	7 13	23 44 53 65	AZ(SE) CO(SE) NM	
Family ANGUIDAE - Lateral Fold Lizards					
Genus GERRHONOTUS - Alligator Lizards					
SOUTHERN ALLIGATOR LIZARD *Gerrhonotus multicarinatus* (Gemu)	Typically found in grassland, chaparral, oak woodland, and forest. It is most likely to be found near streams or in the moist bottoms of canyons, with dense vegetation. It will climb bushes and tress in search for prey. Its diet includes slugs, insects, centipedes, scorpions, spiders including the black widow, bird eggs, and young birds. There are three western subspecies:				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*CALIFORNIA ALLIGATOR LIZARD *Gerrhonotus m. multicarinatus* (Gemumu)	Found along the California coast, from about Los Angeles to the region of Fort Brag. This subspecies inhabits the bottomlands along rivers in the Sacramento Valley, the digger and yellow pine belts in the northern Sierra foothills, oak forests, chaparral, and in the coastal area, sand dunes and rocky, treeless hills.	3	5 30 33 48	CA(W)	
*SAN DIEGO ALLIGATOR LIZARD *Gerrhonotus m. webbi* (Gemuwe)	Found in regions of scrub oak and low bushes.	3	30 33 36 48	CA(SW)	
*OREGON ALLIGATOR LIZARD *Gerrhonotus m. scincicauda* (Gemusc)	Typically in the Garry oak belt, and in yellow pine, black oak, and madrone dominated areas. It conceals itself under leaf litter around the roots of the bushes. Hibernation is November until late March. Eggs are laid early August and late July. The young hatch in September.	1 2 4	26 28	CA(NW) OR(W) WA(S, peripheral)	
PANAMINT ALLIGATOR LIZARD *Gerrhonotus panamintinus* (Gepa)	Found in Panamint, Nelson, and Inyo Mountains, California. It inhabits rockslides and areas of dense plant growth. The associated vegetation includes thickets of willow and wild grape, creosote bush, and desert mint. It is typically found under rocks in damp gullies and along streams. This species is threatened in California and is protected by state law.	7	41	CA	Threatened (CA)
ARIZONA ALLIGATOR LIZARD *Gerrhonotus kingi* (Geki)	Found on the southern edge of the central plateau of Arizona south in the Sierra Madre to Jalisco, Huachuca, Santa Rita, Pajarito, and Chiricahua Mountains, and southern New Mexico. It inhabits the mountains in evergreen woodland and coniferous forest, and at lower elevations in broadleaf riparian woodland along major drainageways in desert and grassland. The associated vegetation includes chaparral, oak, pine, cottonwood, and fir. The lizard is typically found principally in canyons and on hillsides near and under logs, under rocks and litter, and occasionally in woodrat nests and rodent burrows. Its diet includes insects and scorpions. There is one western subspecies:				
*ARIZONA ALLIGATOR LIZARD *Gerrhonotus k. nobilis* (Gekino)		7 12	18 19 31 32	AZ(SE) NM(SW)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
NORTHERN ALLIGATOR LIZARD *Gerrhonotus coeruleus* (Geco)	Primarily an inhabitant of woodland and forest, this species occurs infrequently in grassland and sagebrush habitats. It is typical of a cooler, more humid area. It occurs under bark, inside rotten logs, and under rocks and debris on the ground. The diet includes insects, spiders, millipedes, and snails. There are four western subspecies:				
*SAN FRANCISCO ALLIGATOR LIZARD *Gerrhonotus c. coeruleus* (Gecoco)	Found north and south of San Francisco Bay.	3	6 30	CA(W)	
*SHASTA ALLIGATOR LIZARD *Gerrhonotus c. shastensis* (Gecosh)	Usually in a well-drained situation, with decaying wood in the vicinity.	3 4	5 6 26 29 30	CA(N) NV(peripheral) OR(S)	
*NORTHERN ALLIGATOR LIZARD *Gerrhonotus c. principis* (Gecopr)	Found in open glades in forest of Port Orford cedar and Douglas fir, with a heavy undergrowth of bladeberry and tall ferns.	1 2 8	1 2 3 11 12 13	CA(extreme NW) ID(N) MT(W) OR(W) WA	
*SIERRA ALLIGATOR LIZARD *Gerrhonotus c. palmeri* (Gecopa)	Found mainly on the western slope of the Sierra Nevadas. It may be beneath strips of yellow pine bark or the bare rock beneath loose slabs of granite.	4	5	CA NV(W)	
Family ANNIELLIDAE					
Genus ANNIELLA - California Legless Lizards					
CALIFORNIA LEGLESS LIZARD *Anniella pulchra* (Anpu)	Found from the San Joaquin River near Antioch, southward, chiefly west of the Sierra Nevada. It inhabits the sparse vegetation of beaches, chaparral, pine-oak woodland, and streamside growth of sycamores, cottonwoods, and oaks. It burrows in washes, beach sand dunes, and loose alluvium near permanent or intermittent streams. It also may be found under rocks, driftwood, logs, and leaf litter. The diet includes the larvae of insects, small adult beetles, and spiders. The lizard is nocturnal and appears to be most active in May. The species is threatened from the destruction of its habitat by agricultural land usage and urbanization. It is protected by California state law. There are two western subspecies:				Threatened (CA)

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*SILVERY LEGLESS LIZARD *Anniella p. pulchra* (Anpupu)		3	30 33 35 36	CA(W)	
*BLACK LEGLESS LIZARD *Aniella p. nigra* (Anpuni)	Most typical from Monterey Peninsula.	3	33 35	CA(W)	
Family HELODERMIDAE - Venomous Lizards					
Genus HELODERMA - Beaded Lizards					
GILA MONSTER *Heloderma suspectum* (Hesu)	Typically found on rocky foothill terrain, rocky to gravelly bajadas, and in rocky canyons. It ranges sparingly into open desert-grassland and oak woodland. It seems to prefer irrigated areas or rocky areas with scattered bushes. Also, it is associated with sahuaro-ocotillo and mesquite. It will burrow into sand, or occupy rodent burrows, woodrat nests, dense thickets, or crevices under rocks. It may be near the den of the western diamondback rattlesnake. It is typically active at dusk or after dark after warm summer rains, and is diurnal during the cold spring months. Its diet includes small rodents, birds, bird and reptile eggs, rabbits, and occasionally other lizards. Commercial exploitation has threatened this species in Nevada and Utah, and endangered it in New Mexico. It is protected in all three states by state laws. There are two western subspecies:				ENDANGERED (NM) Threatened (NV, UT)
*RETICULATE GILA MONSTER *Heloderma s. suspectum* (Hesusu)		7 12	27 31 32 42 43	AZ(S) NM(SW)	
*BANDED GILA MONSTER *Heloderma s. cinctum* (Hesuci)		7	41 42 43	AZ(W) CA(SE) NV(S) UT(SW)	

Class REPTILIA
Order SQUAMATA
Suborder SERPENTES - Snakes

		PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family LEPTOTYPHLOPIDAE - Slender Blind Snakes					
WESTERN BLIND SNAKE *Leptotyphlops humilis* (Lehu)	Found in the desert-greasewood plains, on brush-covered foothill slopes, on chaparral, and in other similar areas with soil suitable for burrowing. It is seldom found on sandy flats, dry lake bottoms, or alluvial fans. It may be found among the roots of desert trees and shrubs, under rocks, in rock crevices, under ground litter or near ant nests. Slightly damp soil seems to be preferred. It occasionally comes above the ground at night. The diet of this snake includes insects, salamanders, and termites. There are four western subspecies:				
*SOUTHWESTERN BLIND SNAKE *Leptotyphlops h. humilis* (Lehuhu)	Destruction of its habitat is endangering this species in certain areas. There is no protection for the snake.		33 40 41	AZ(C&S) CA(S) NV(S) UT	ENDANGERED (UT)
*DESERT BLIND SNAKE *Leptotyphlops h. cahuilae* (Lehuca)	Restricted range.	7	42	AZ(SW) CA(SE)	
*TRANS-PECOS BLIND SNAKE *Leptotyphlops h. segregus* (Lehuse)	Associated with catclaw and streambeds. It is threatened, but not protected in New Mexico.	7	44 58	AZ(SE) NM(S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*UTAH BLIND SNAKE *Leptotyphlops h. utahensis* (Lehuut)	Restricted range.		40 41	NV(SE) UT(extreme SW)	
TEXAS BLIND SNAKE *Leptotyphlops dulcis* (Ledu)	Found typically in partially sandy and loamy semiarid grassland plains and the upper edge of the desert. It may be found in canyon bottoms and juniper-oak associations (Texas), where moisture may be locally present. It is a burrower, and may be found among the roots of trees and shrubs, under rocks in rock crevices, and under wood and litter on the surface of the ground. The snake is nocturnal, and is most common after warm spring and summer rains. There are two American subspecies, one in the West:				
*NEW MEXICO BLIND SNAKE *Leptotyphlops d. dissecta* (Ledudi)	Feeds on ants and their eggs.	7 13	31 58 59	AZ(SE) NM(S, peripheral)	
Family BOIDAE - Boas					
Genus CHARINA - Rubber Boas					
RUBBER BOA *Charina bottae* (Chbo)	Primarily a snake of mountainous regions. It is often found in a meadow in coniferous forest, by a rocky stream having banks of sand or loam. It burrows in the loose soil, and is a good swimmer. Grassland and lower woodland may also be frequented. Rotting logs, rocks, and the bark of fallen and standing dead trees are common hideouts. Its diet includes small rodents, insects, and lizards. Commercial exploitation is threatening this species in California, and it is protected by state law. There are three western subspecies:				Threatened (CA)
*PACIFIC RUBBER BOA *Charina b. bottae* (Chboto)	Occurs in silt-filled canyons.	1 3 4	1 2 3 5 6 29 30	CA OR(W) WA(W)	
*SOUTHERN RUBBER BOA *Charina b. umbratica* (Chboum)	Known only from a few small, isolated populations, in southern California--San Jacinto Mountains in Riverside County and San Bernardino Mountains in San Bernardino County.	3	5	CA(S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*ROCKY MOUNTAIN BOA *Charina b. utahensis* (Chbout)	Has a wide range.	5 6 8 9 12	4 10-15 20 22 23	CA(NE) CO(W) ID MT(W) NV(N) OR UT WA	
Genus LICHANURA - Rosy Boas					
ROSY BOA *Lichanura trivirgata* (Litr)	Found in the Sonoran Desert, and the southeastern edge of the Mojave Desert, eastward in southern Arizona to the Harquahala Mountains and the vicinity of Aquila, Maricopa County; and southward through the Organ Pipe National Monument area. It inhabits rocky brushlands and desert, many times near oases and permanent and intermittent streams. Rocky canyons and lower mountain slopes are commonly occupied. It is typically most active in the early evening or night, and occasionally during the day. The diet includes small rodents and birds. It is live-bearing. There are three western subspecies:				
*MEXICAN ROSY BOA *Lichanura t. trivirgata* (Litrtr)		7	42 43	AZ(S) NM(W)	
*COASTAL ROSY BOA *Lichanura t. roseofusca* (Litrro)		3	5 30 33 35	CA(SW)	
*DESERT ROSY BOA *Lichanura t. gracia* (Litrgr)	Isolated populations in the Harcuvar, Harquahala, Castle Dome, and Kofa Mountains, Arizona.	7	41 42 43	AZ(SW) CA(SE) NV(S, peripheral)	
Family COLUBRIDAE - Common Harmless Snakes					
Genus DIADOPHIS - Ring-necked Snakes					
RINGNECK SNAKE *Diadophis punctatus* (Dipu)	Found typically in woodland, but it also occurs in humid habitats in forest, grassland, and chaparral. In the arid parts of the West, it is restricted either to the mountains or along streams. It is usually found under rocks, logs, boards and other debris, especially when the ground is damp underneath the objects. Its diet includes salamanders, small frogs, lizards, small snakes, worms and insects. There are eleven subspecies, eight in the West:				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*PRAIRIE RINGNECK SNAKE *Diadophis p. arnyi* (Dipuar)		13	59 65 71	CO(E) NM(E)	
*REGAL RINGNECK SNAKE *Diadophis p. regalis* (Dipure)	Occurs in extreme E. CA in the Providence and possibly the Clark Mountains.	6 7 9 12	18 19 20 31 32 37	AZ NM ID(SE) NV(SE) UT(W&C)	
*SAN DIEGO RINGNECK SNAKE *Diadophis p. similis* (Dipusi)	Occurs from southwest San Bernardino County southward.	3	30 33 35	CA(SW)	
*SAN BERNARDINO RINGNECK SNAKE *Diadophis p. modestus* (Dipumo)	Occurs in northern San Diego County and southern Los Angeles County, east to the San Bernardino Mountains.	3	30 33 36	CA(W)	
*MONTEREY RINGNECK SNAKE *Diadophis p. vandenburghi* (Dipuva)	Ranges from Ventura County to Santa Cruz County.	3	30 33 35	CA(W)	
*PACIFIC RINGNECK SNAKE *Diadophis p. amabilis* (Dipuam)	Occurs in the foothills of the central valley of California and the San Francisco Bay region.	3	6 29 30 33	CA(W)	
*CORAL-BELLIED RINGNECK SNAKE *Diadophis p. pulchellus* (Dipupu)	Found on the western slopes of the Sierra Nevadas.	4	5 30 33	CA	
*NORTHWESTERN RINGNECK SNAKE *Diadophis p. occidentalis* (Dipuoc)		1 2	1 2 3 5 6	CA(NW) OR(W) WA(S)	
Genus CONTIA - Sharp-tailed Snakes					
SHARP-TAILED SNAKE *Contia tenuis* (Coten)	This snake is found in forest, woodland, and grassland, usually near streams. It is typical of pastures and open meadows on the edge of redwood and other coniferous forest and among oaks in the lower foothills. A moist environment is preferred, and it retreats under logs, the bark of fallen and standing	1 2 3 4	2 3 5 6 26 28 30	CA OR(W) WA(peripheral)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	dead trees, rocks, and other debris when the ground surface is dry. The peak of activity occurs on warm days following rains, from March to June. It apparently feeds on slugs.				
Genus HETERODON - Hog-nosed Snakes					
WESTERN HOGNOSE SNAKE *Heterodon nasicus* (Hena)	Typical of open, flat or rolling plains in the grassland. Sandy or gravelly soil is always part of the habitat. It occasionally ranges into mountain canyon bottoms or floodplains of streams with canopies of sycamore, walnut, cottonwood, or willow, and with alluvial deposits suitable for burrowing. Open and grassy meadows are occupied. Eggs are laid in July and August, hatching in late August and early September. Its diet includes frogs, toads, salamanders, and lizards. There are three western subspecies:				
*PLAINS HOGNOSE SNAKE *Heterodon n. nasicus* (Henana)		7 13 15 16	53 58 59 64 65 66 70 71	CO(E) MT(E) NM WY(E)	
*DUSTY HOGNOSE SNAKE *Heterodon n. gloydi* (Henagl)		13	59 65 71	NM(SE)	
*MEXICAN HOGNOSE SNAKE *Heterodon n. kennerlyi* (Henake)		7	58 59	AZ(SE) NM(S)	
Genus PHYLLORHYNCHUS - Leaf-nosed Snake					
SPOTTED LEAF-NOSED SNAKE *Phyllorhynchus decurtatus* (Phde)	This snake is typically found in open desert plains, in sandy or gravelly areas. The associated vegetation is mesquite and creosote bush. Its diet consists of small lizards, including banded geckos and their eggs. There are two western subspecies:				
*CLOUDED LEAF-NOSED SNAKE *Phyllorhynchus d. nubilis* (Phdenu)	Restricted to the vicinity of Tucson in Pima County, Arizona	7	27 42 43	AZ(S)	
*WESTERN LEAF-NOSED SNAKE *Phyllorhynchus d. perkinsi* (Phdepe)	Destruction of its habitat is harming this species in Utah.	7	27 41 42 43	AZ(W&SW) CA(SE) NV(S) UT(peripheral)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
SADDLED LEAF-NOSED SNAKE *Phyllorhynchus browni* (Phbr)	Found in the Sonoran Desert. It usually occurs in relatively rocky, gravelly soils as well as in the sand, being less frequent in open sandy plains. The associated vegetation includes mesquite, saltbush, creosote bush, palo verde and saguaro cactus. It is nocturnal, and is most active after summer rains, on humid nights. There are two western subspecies:				
*PIMA LEAF-NOSED SNAKE *Phyllorhynchus b. browni* (Phbrbr)		7	27 42 43	AZ(S)	
*MARICOPA LEAF-NOSED SNAKE *Phyllorhynchus d. lucidus* (Phbrlu)	Restricted to an area in northeast Maricopa County, along the bases of the mountains from near Cave Creek to Indian Wells.	7	27 42 43	AZ(S)	Rare
Genus OPHEODRYS - Green Snakes					
SMOOTH GREEN SNAKE *Opheodrys vernalis* (Opve)	This snake ranges from the lowlands well up into the mountains in damp grassy environment. Grassy fields, meadows, the sides or tops of mountains, low bushes, boggy areas, stream borders, and rocky habitats interspersed with grass are commonly occupied. Eggs are laid in June, July, and August, and sometimes into September. The young hatch in late August, September and October. The diet of the snake includes insects and spiders. There are two western subspecies:				
*EASTERN SMOOTH GREEN SNAKE *Opheodrys v. vernalis* (Opveve)	Its diet consists of insects, salamanders, spiders, slugs, snails, centipedes, and millipedes.	15	17	WY(NE)	
*WESTERN SMOOTH GREEN SNAKE *Opheodrys v. blanchardi* (Opvebl)	Threatened in Colorado and protected by state law.	7 9 10 11	12 15 18 21 23	CO MT(peripheral) NM UT(NC) WY	Threatened (CO)
ROUGH GREEN SNAKE *Opheodrys aestivus* (Opae)	This arboreal snake is typically found in moist woodland with abundant plant cover. It is only known from Cimarron, Colfax County, New Mexico in the west. Bushes, small or growing	11 13	18 31	NM(NE)	

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SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	trees, vines, and hedges are occupied. The associated vegetation (much is eastern) includes oaks, scrub pines, magnolia, sassafras, alder, orange, sumac, dogwood, cedar, cherry, elm, sycamore, and pecan. It will enter shallow bodies of water. Its diet includes grasshoppers, crickets, caterpillars, and spiders. Eggs are laid in mid-summer, and the young hatch in late August and September.				
Genus COLUBER - Racers					
RACER *Coluber constrictor* (Coco)	This snake is typical of open habitats, in both semiarid and moist environments. It avoids extremely dry areas and high mountains. It inhabits open woodland, wooded ravine, brambly thickets, bushes, meadows, grassy fields, pastures, and cultivated fields. More specifically, it occupies grassy places near rocks, logs, streambanks, debris, and blackberry bushes. It is primarily ground-dwelling, but it may ascend bushes and trees. The young probably hatch in late July and early August. Its diet includes lizards, frogs, small rodents, young birds, poisonous snakes, and especially insects. There are eight subspecies in the country, two in the West:				
*EASTERN YELLOW-BELLIED RACER *Coluber c. flaviventris* (Cocofl)		9 10 11 13 15 16	16 17 18 64 65 66 70	CO(E) MT(E) NM WY(C&E)	
*WESTERN YELLOW-BELLIED RACER *Coluber c. mormon* (Cocomo)	Threatened in New Mexico. There is no protection.	1-6 8 9 10 12	10 11 20 22 23 30 38 48 55 56 63	AZ(NW, peripheral) CA(N&W) CO(WC) ID MT(SW) NV(N&S) OR UT WA WY(E)	Threatened (NM)
Genus MASTICOPHIS - Whip Snakes					
COACHWHIP *Masticophis flagellum* (Mafla)	Found in several different habitats. It is widely distributed over the deserts and grassland areas, and range into brushland, woodland, and farmland. It usually avoids dense				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	vegetation. The terrain is varied, and may be flat or hilly, sandy or rocky. It is active during the day even in hot weather. It takes refuge in rodent burrows, in woodrat nests, among rocks, and in the branches of trees and shrubs. Its diet includes small rodents, birds and their eggs, lizards, snakes, insects, and carrion. Eggs are laid in June and July. There are six subspecies in the United States, five in the West:				
*SONORA RED RACER *Masticophis f. cingulum* (Maflci)	Occurs from Santa Cruz County, Arizona, southward.		31 58	AZ (S)	
*LINED WHIP SNAKE *Masticophis f. lineatulus* (Maflli)	A mountainous subspecies.	7	31 58	AZ(SE) NM(SW)	
*RED RACER (Western Black Racer) *Masticophis f. piceus* (Maflpi)	Associated with creosote or greasewood, prickly pear, Celtis, Atriplex, mesquite tangles, or bushes.	3 6 7 12	27 39 40 41 42 43	AZ(SW) CA(S) NV UT(SW)	
*SAN JOAQUIN WHIP SNAKE *Masticophis f. ruddocki* (Maflru)	Found in the San Joaquin Valley, California. Destruction of its habitat by agriculture and urbanization has endangered this species. It is protected by California state law.	3 4	30 48	CA(C)	ENDANGERED (CA)
*WESTERN COACHWHIP *Masticophis f. testaceus* (Maflte)	Associated with catclaw-tobosa, creosote bush-catclaw-blackbrush, mesquite-huisache-blackbrush, and yucca-tobosa.	7 13	42 54 58 59 60	CO(E) NM (E&C)	
STRIPED RACER *Masticophis lateralis* (Mala)	This snake is typical of the chaparral of western California. It is seldom seen in the open, but occupies brushy places, grassy slopes, grassy meadows, and rocky gullies or stream courses. It is primarily in the foothills but ranges into the mountains in mixed deciduous and pine forests. It is nearly always associated with manzanita or ceanothus thickets. Its diet includes frogs, lizards, snakes, small rodents, birds, and probably insects. There are two western subspecies:				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*CALIFORNIA STRIPED RACER *Masticophis l. lateralis* (Malala)		3 4	5 30 33 36	CA(W)	
*ALAMEDA STRIPED RACER *Masticophis l. euryxanthus* (Malaeu)		3	29 30 33	CA(W)	
STRIPED WHIPSNAKE *Masticophis taeniatus* (Mata)	Found in both flatlands and mountains. The associated vegetation includes grassland, cactus, dasylirion, agave, berberis, trifoliata, pinyon-juniper, pine-oak, fir, and willow. It occupies open plains and mesas in canyons and along streamways. It forages and takes refuge in rock outcrops, rodent burrows, and in trees and shrubs. Its diet includes lizards, snakes, small rodents, young birds, and insects. There are four subspecies in the United States, one in the West:				
*DESERT STRIPED WHIPSNAKE *Masticophis t. taeniatus* (Matata)	This subspecies is suffering from the manipulation of its aquatic habitat (WA). There is no protection.	5 6 7 12 13	10 18 19 22 23 32 37 38 40 55 58	AZ CA(E) CO(W, peripheral) ID(S) NM NV OR(C) UT WA(SC, peripheral)	
SONORA WHIPSNAKE *Masticophis bilineatus* (Mabi)	Typically found in mountainous regions, and ranges through semiarid lower mountain slopes and grassland into the upper desert. The associated vegetation includes pine, oak, catclaw, desert hackberry, grass, saguaro cactus, paloverde, and ocotillo. The snake frequents rocky stream courses, in canyons, on hillsides, and on walls of rock. It forages and takes shelter in shrubs and trees, as well as on the ground. It is egg-laying. The diet consists primarily of young birds. There are two western subspecies:				
*SONORA WHIPSNAKE *Masticophis b. bilineatus* (Mabibi)	Protected by law in New Mexico.	7 12	19 32 43 58	AZ(SE) NM(SW, peripheral)	
*AJO MOUNTAIN WHIPSNAKE *Masticophis b. lineolatus* (Mabili)	Restricted to the Organ Pipe Cactus National Monument in Pima County.	7	43	AZ(S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Genus Salvadora - Patch-nosed Snake					
WESTERN PATCH-NOSED SNAKE *Salvadora hexalepis* (Sahe)	Found in the desert, grassland, and occasionally into the chaparral. It prefers open, flat sunny areas, and occurs in sandy and rocky areas both on lower mountain slopes and in the driest parts of the desert. The associated vegetation includes creosote, greasewood, and grasses. It is a ground dweller, usually along desert water courses. It feeds on lizards, small rodents, and probably lizard eggs. There are four subspecies:				
*DESERT PATCH-NOSED SNAKE *Salvadora h. hexalepis* (Sahehe)		7	42 43 58	AZ(SW) CA(SE)	
*BIG BEND PATCH-NOSED SNAKE *Salvadora h. deserticola* (Sahede)		7	44 58 59	AZ(SE) NM(S)	
*MOJAVE PATCH-NOSED SNAKE *Salvadora h. mojavensis* (Sahemo)		7	23 38 40 41	AZ(NW) CA(SE) NV(S&C) UT(S)	
*COAST PATCH-NOSED SNAKE *Salvadora h. virgultea* (Sahevi)	Along the southern California coast, south of Point Conception	3	33 35 36 48	CA(S)	
MOUNTAIN PATCH-NOSED SNAKE *Salvadora grahamiae* (Sagr)	A mountainous snake, found in rocky canyons, plateaus, and mountain slopes. It prefers open, sunny and often rocky areas in evergreen woodland and lower ponderosa pine forest. The associated vegetation includes catclaw-cedar, lechuguilla-beargrass, tobosa-gramma, and sometimes creosote bush. Its diet includes lizards and probably rodents. There are two subspecies, one in the West:				
*MOUNTAIN PATCH-NOSED SNAKE *Salvadora g. grahamiae* (Sagrgr)	Has a limited and scattered distribution.	7 12	18 19 21	AZ(extreme S) NM	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Genus ELAPHE - Rat Snakes					
CORN SNAKE *Elaphe guttata* (Elgu)	Found along stream and river bottoms, on rocky wooded hillsides, and in coniferous forest. It occurs primarily on the ground, but climbs well. It retreats into rodent burrows and under logs, rocks, and other objects. Its diet includes small rodents, birds, lizards, and frogs. Eggs are laid in midsummer. There are three subspecies, one in the West:				
*GREAT PLAINS RAT SNAKE *Elaphe g. emoryi* (Elguem)	Threatened in New Mexico. There is no protection.	12 13	18 23 65 71	CO(SE&W) NM(E) UT(E)	Threatened (NM)
GREEN RAT SNAKE *Elaphe triaspis* (Eltr)	Found only in the Baboquivari, Pajarito, Santa Rita, and Chiricahua Mountain regions. It occupies wooded, rocky canyon bottoms, usually near streams. The associated vegetation includes pine, oak, sycamore, walnut, cottonwood, wild grape, and willow. It may be found in trees and bushes during the day and rock crevices and burrows at night. Its diet includes rodents (woodrats) and birds. There is only one subspecies in the country:				
*GREEN RAT SNAKE *Elaphe t. intermedia* (Eltrin)	A Mexican species. Commercially exploited.	7	19 31	AZ(S) NM(peripheral)	
TRANS-PECOS RAT SNAKE *Elaphe subocularis* (Elsu)	Found near the Organ Pipe Mountains, New Mexico. In desert area composed of coarse alluvial sands and gravels, with a sparse cover of grass. The associated vegetation includes agave-creosote bush-ocotillo, persimmon-shin oak-cedar, and yucca-mesquite-cactus. It is commercially exploited, and there is no protection.	7	31 44 58 59	NM(extreme S)	
Genus - ARIZONA					
GLOSSY SNAKE *Arizona elegans* (Arel)	Seems to prefer open areas, occupying many habitats on chaparral, grassland, light brushy to barren desert, sagebrush flats, and woodland. Sandy or loamy areas with scattered rocks are usually preferred. It usually remains underground in rodent burrows during the day. The eggs hatch in August. Its diet includes lizards, snakes, and small rodents. There are seven subspecies in the country:				

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SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*TEXAS GLOSSY SNAKE *Arizona e. elegans* (Arelel)		7 13	43 44 58 59 65	CO NM	
*WESTERN GLOSSY SNAKE Arizona e. candida (Arelca)	Restricted to the Antelope Valley and extreme western Mojave Desert in Inyo, Kern, Los Angeles, and San Bernardino Counties.	7	41	CA	
*DESERT GLOSSY SNAKE *Arizona e. eburnata* (Areleb)		7	40 41 42	AZ (NW&SW) CA(SE) NV(S) UT (extreme SW)	ENDANGERED (UT) No protection
*ARIZONA GLOSSY SNAKE *Arizona e. noctivaga* (Arelno)		7	27 32 42 43	AZ (S&W)	
*CALIFORNIA GLOSSY SNAKE *Arizona e. occidentalis* (Areloc)	Occupies the San Joaquin Valley, from central San Joaquin County to the Tehachapi Mountains, and the coastal region of southern California southward from Los Angeles County.	3	30 33 35 48	CA(SW)	
*PAINTED DESERT GLOSSY SNAKE *Arizona e. philipi* (Arelph)		7 12	23 38 53 58	AZ (C&SE) NM(SC) UT (exteme S)	
Genus PITUOPHIS - Gopher Snakes					
GOPHER SNAKE *Pituophis melanoleucus* (Pime)	A highly adaptable species, its habitat ranges from the lowlands high into the mountains. It is common in grassland and open brushland, and also occupies desert, woodland, coniferous forest, and farmland. The soil may be sand, loam, rock, or hardpan. It is principally a ground dweller and rodent burrow hunter. It will dig in loose soil, and will climb into trees and shrubs to hunt birds. It may be found during the day under rocks, logs, boards, and trash. Its diet includes rodents, rabbits, birds and their eggs, and occasionally lizards. There are six subspecies.				
*BULLSNAKE *Pituophis m. sayi* (Pimesa)		8 9 10 11 13 14 15 16	11 12 17 18 53 58 59 64 65 66 70	CO(E) MT NM(E) WY(N&E)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*SONORA GOPHER SNAKE *Pituophis m. affinis* (Pimeaf)		7 11 12	18 19 23 31 32 42 43 53 58	AZ CA(S) CO(extreme S.) NM	
*GREAT BASIN GOPHER SNAKE *Pituophis m. deserticola* (Pimede)		2 4 5 6 7 8 9 10 12	11 12 14 23 38 40 55	CA(E) CO(extreme W) ID NV OR(E) UT WA(E) WY(W)	
*PACIFIC GOPHER SNAKE *Pituophis m. catenifer* (Pimeca)	As far south as Santa Barbara County	1-4	1-6 29 30 48	CA(W&C) OR(W)	
*SAN DIEGO GOPHER SNAKE *Pituophis m. annectens* (Pimean)	Occurs only on the coastal region of southern California, from about Santa Barbara County southward.	3	33 35 36 48	CA(SW)	
*SANTA CRUZ ISLAND GOPHER SNAKE *Pituophis m. pumilis* (Pimepu)	Found only on Santa Cruz Island.	3	33 35	CA(SW)	
Genus LAMPROPELTIS - King Snakes					
COMMON KINGSNAKE *Lampropeltis getulus* (Lage)	Found in many different habitats, in coniferous forest, woodland, swampland, river bottoms, prairie, chaparral, farmland, and desert. It inhabits areas with rock outcrops and clumps of vegetation, under rotting logs, old lumber, and rocks. It is a highly adaptable ground dweller and burrow hunter, but also forages in trees and shrubs. It is quite active in the desert and desert grassland during and immediately after summer rains. Eggs are laid in the early summer and hatch in late summer and fall. The snakes'diet includes snakes, including rattlers, lizards, frogs, birds and their eggs, and small mammals. There are ten subspecies in the country, four in the West:				
*CALIFORNIA KINGSNAKE *Lampropeltis g. californiae* (Lageca)		1 2 3 4 6 7 12	5 8 19 23 30 32 38 40 41 48 58	AZ(NW) CA NV(S&W) OR(W) UT(S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*YUMA KINGSNAKE *Lampropeltis g. yumensis* (Lageyu)		7	31 32 42 43 58	AZ(S) CA(extreme SE)	
*SONORA KINGSNAKE *Lampropeltis g. splendida* (Lagesp)		7 13	23 44 58 59 65	AZ(SE) NM(S&C)	Threatened (NM) No protection
*BLACK KINGSNAKE *Lampropeltis g. nigritus* (Lageni)	A Mexican subspecies.	7	31 58	AZ(extreme S)	
CALIFORNIA MOUNTAIN KINGSNAKE *Lampropeltis zonata* (Lazo)	Has a resemblance to the venomous coral snakes. It is typical of moist areas of coniferous forest, woodland, and chaparral. It is usually near rocky streams, with rotting logs in the vicinity. It is primarily nocturnal, but nocturnal in warm weather. Its diet consists of lizards, bird nestlings, small mammals, and other snakes. There are seven subspecies:				
*ST. HELENA MOUNTAIN KINGSNAKE *Lampropeltis z. zonata* (Lazozo)	Found north of the San Francisco Bay area, in Lake, Mendoccino, Napa, and Sonoma Counties.	3	5 29	CA(NW)	
*COAST MOUNTAIN KINGSNAKE *Lampropeltis z. multifasciata* (Lazomu)	Found south of the San Francisco Bay area around Santa Clara County.	3	30 33	CA	
*SIERRA MOUNTAIN KINGSNAKE *Lampropeltis z. multicincta* (Lazomu)	Found in the Sierra Nevadas, ranging from Kern County, Calif. northward into Washington. It is commercially exploited (WA).	4	5	CA(C) OR(SW) WA(S, peripheral)	
*SAN BERNARDINO MOUNTAIN KINGSNAKE *Lampropeltis z. parvirubra* (Lasopa)	Ranges from Los Angeles County into San Bernardino County and north-central Riverside County.	3	5 33	CA(SC)	
*SAN DIEGO MOUNTAIN KINGSNAKE *Lampropeltis z. pulchra* (Lazopu)	Occurs in southern California in Los Angeles, Orange, Riverside, and San Diego Counties.	3	5 30 33	CA(S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
* *Lampropeltis z. agalma* (Lazoag)					?
* *Lampropeltis z. herrerae* (Lazohe)					?
SONORA MOUNTAIN KINGSNAKE *Lampropeltis pyromelama* (Lapy)	Typically found at higher elevations. It is found in pinyon-juniper woodland, chaparral, oak woodland, sycamore, walnut, and up into the pine-fir forest. It is usually found on the ground surface in mountain canyons, and is occasionally under logs, rocks, and other objects. It is capable of climbing into trees and shrubs. Its diet consists of lizards and probably snakes and small mammals. There are three subspecies in the country:				
*ARIZONA MOUNTAIN KINGSNAKE *Lampropeltis p. pyromelana* (Lapypy)	Found north of the Huachuca Mountains. It is commercially exploited (NM).	7 12	19 23 31 32	AZ(C&E) NM(SW)	
*UTAH MOUNTAIN KINGSNAKE *Lampropeltis p. infralabialis* (Lapyin)	Occurs from the Grand Canyon region of Arizona, northward. Commercial exploitation is threatening this subspecies. Its habitat is protected.	12	12 19 20 23 37	AZ NV(E) UT(C)	Threatened (UT)
*HUACHUCA MOUNTAIN KINGSNAKE *Lampropeltis p. woodini* (Lapywo)	Restricted to the Huachuca Mountains.	7	19 31	AZ(S)	
MILK SNAKE *Lampropeltis triangulum* (Latr)	Found in many different habitats - coniferous forest, broadleaf woodland, river bottoms, rocky hillsides, prairies, sand dunes, and farmland. It prefers open, flat and undulating terrain with scant vegetation. It is usually under rotten logs, stumps, bark, rocks, and boards. Primarily nocturnal, especially in warm weather. The diet includes insects, earthworms, young snakes, small mammals (mice), lizards, and occasionally birds and their eggs. There are ten subspecies in the country, four in the West:				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*PALLID MILK SNAKE *Lampropeltis t. multistrata* (Latrmu)	Commercially exploited (CO).	10 13 15 16	16 17 64 65 66	CO(extreme NE) MT(SE) WY(E)	
*WESTERN MILK SNAKE *Lampropeltis t. gentilis* (Latrge)		13 14	65 70	CO(E) NM(NE&E)	Threatened (NM)
*NEW MEXICAN MILK SNAKE *Lampropeltis t. celaemops* (Latrce)	Commercially exploited	7 11 12	18 23 53 58	CO(extreme S) NM	Threatened (NM) No protection
*UTAH MILK SNAKE *Lampropeltis t. taylori* (Latrta)	Commercially exploited.	9 12	12 15 20 23	AZ(N, peripheral) CO(W) UT(C&NE)	Threatened (NM) No protection
DAVIS MOUNTAIN KING-SNAKE *Lampropeltis mexicana alterna* (Lameal)	Found in the Big Bend, and Davis and Guadaloupe Mountain areas, Trans-Pecos Texas.				
Genus RHINOCHEILUS - Long-nosed Snakes					
LONG-NOSED SNAKE *Rhinocheilus lecontei* (Rhle)	This snake inhabits desert, prairie, and grassland, usually in irrigated areas. It is crepuscular and nocturnal, remaining underground in rodent burrows during the day. It may be found during the day under flat objects - boards, fallen signs, stones, etc. Eggs are laid in July. The diet includes lizards and small rodents. There are three subspecies in the country, two in the west:				
*WESTERN LONG-NOSED SNAKE *Rhinocheilus l. lecontei* (Rhlele)		3 6 7 12	38 40 41 42 43 48 58	AZ(W&S) CA IID(S) NV UT(W &SE)	
*EASTERN LONG-NOSED SNAKE *Rhinocheilus l. tessellatus* (Rhlete)		7 13	44 53 58 59 65	NM(SC&E) CO(peripheral)	
Genus NERODIA - Water Snakes					
PLAIN-BELLIED WATER SNAKE *Nerodia erythrogaster* (Neer)	Found along river courses into arid country. It is typical of permanent or semipermanent streams, ditches, and cattle tanks. It swims with ease. It may be associated with salt-cedar, field, and walnut-desert willow. Although highly				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	aquatic, it may be found away from water in hot, humid weather. It is live bearing. The diet of this snake includes crayfish, fish, frogs, tadpoles, and salamanders. There are three subspecies in the United States, one in the West:				
*BLOTCHED WATER SNAKE *Nerodia e. transversa* (Neertr)		13	59	NM(extreme SE)	
COMMON WATER SNAKE *Nerodia sipedon* (Nesi)	Found in or near lakes, streams, ponds, creeks, rivers, swamps, and marshes. It may bask on shore or on logs or piles of rotting vegetation in the water. It is highly aquatic, seldom away from the water. Its diet includes crayfish, fish, salamanders, frogs, toads, tadpoles, insects, and small mammals. It is live-bearing. There are three subspecies in the United States, one in the West:				
*NORTHERN WATER SNAKE *Nerodia s. sipedon* (Nesisi)		13 14	65 70	CO(E)	
Genus THAMNOPHIS - Garter Snake					
NARROW-HEADED GARTER SNAKE *Thamnophis rufipunctatus* (Thru)	Restricted to the highlands of central and southeast Arizona and southwest New Mexico. It is associated with cottonwood-willow, pinyon-juniper, oak, and ponderosa pine. It is found along clear, permanent or semipermanent rocky streams, preferring well-illuminated spots. It is almost strictly aquatic, and may be found at the water bottom or under a nearby stone. It is live-bearing. The diet includes fish, frogs, tadpoles, and salamanders. Protected by New Mexico state law.	7 12	18 19 23 32	AZ(C&E) NM(W, peripheral)	
COMMON GARTER SNAKE *Thamnophis sirtalis* (Thsi)	Widely distributed, being capable of living in many different environments. It tends to remain near water, entering it freely at all times. Ponds, marshes, prairie swales, roadside ditches, streams, sloughs, damp meadows, woods, farms, and city lots are frequented by this snake. It is live-bearing. The diet consists of fish, earthworms, slugs, frogs, toads, tadpoles, salamanders, birds, leeches, and small mammals. There are nine subspecies in the United States, seven in the West:				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*RED-SIDED GARTER SNAKE *Thamnophis s. parietalis* (Thsipa)		8 9 10 13 14 15 16	12 15 16 17 63 64 65 66 70	CO(N) MT WY(N&E)	
*VALLEY GARTER SNAKE *Thamnophis s. fitchi* (Thsifi)		1 2 3 4 5 8 9	1-5 7 8 11-15 55	CA ID MT(extreme W) NV(NW) OR UT WA	
*RIO GRANDE GARTER SNAKE *Thamnophis s. ornata* (Thsior)	Occurs along the Rio Grande Valley.	7	23 40 44 53 58 66	CO(S) NM	
*CALIFORNIA RED-SIDED GARTER SNAKE *Thamnophis s. infernalis* (Thsiin)	Found along the coast, from Humboldt County to San Diego County.	3	6 29 30 33 47 48	CA(W)	
*SAN FRANCISCO GARTER SNAKE *Thamnophis s. tetrataenia* (Thsite)	Restricted to San Mateo County on the San Francisco peninsula. Habitat destruction from urbanization, road building, etc. has endangered this subspecies. It is protected by state and federal law.	3	29 30 33 47 49	CA(W)	ENDANGERED (CA)
*RED-SPOTTED GARTER SNAKE *Thamnophis s. concinnus* (Thsico)	Found in the coastal region.	1	1 2 28	OR(NW) WA(SW)	
*PUGET SOUND RED-SIDED GARTER SNAKE *Thamnophis s. pickeringi* (Thsipi)		1	1 2	WA(W)	
WESTERN TERRESTRIAL GARTER SNAKE *Thamnophis elegans* (Thel)	Found in a wide variety of habitats, in grassland, brushland, woodland, and forest. It is primarily terrestrial, but well adapted to water, being found near permanent or intermittent streams and ponds. It takes cover either in dense vegetation or in the water. Its diet includes slugs, leeches, earthworms, fish, salamanders, frogs, toads, tadpoles, lizards, small mammals, and occasionally birds. It is live-bearing. There are four subspecies in the United States:				
*WANDERING GARTER SNAKE *Thamnophis e. vagrans* (Thelva)		1 2 5-13 15 16	Wide Range	All	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*MOUNTAIN GARTER SNAKE *Thamnophis e. elegans* (Thelel)		2 4	2 5 7 8 30 34	CA(N) NV(W) OR(W)	
*KLAMATH GARTER SNAKE *Thamnophis e. biscutatus* (Thelbi)		5	10 55	CA(N) OR(S)	
*COAST GARTER SNAKE *Thamnophis e. terrestris* (Thelte)		1 3	2 6 29 30 33 47	CA(W) OR(SW)	
WESTERN AQUATIC GARTER SNAKE *Thamnophis couchi* (Thco)	Found in many aquatic environments, from brackish marshes to high mountain streams. It prefers rivers and streams. Most of the subspecies are diurnal. Its diet includes fish, fish eggs, frogs, toads, tadpoles, salamanders, earthworms and leeches. It is live-bearing. There are six subspecies in the United States:				
*SIERRA GARTER SNAKE *Thamnophis c. couchi* (Thcoco)	A mountain-dwelling snake.	4	5 7 8 23 30	CA(E) NV(W)	
*OREGON GARTER SNAKE *Thamnophis c. hydrophila* (Thcohy)	A coast-dwelling snake.	1 4	2 5 6	CA(NW) OR(SW)	
*AQUATIC GARTER SNAKE *Thamnophis c. aquaticus* (Thcoaq)	Found in the region north of San Francisco Bay.	3	29 30 33 47 49	CA	
*GIANT GARTER SNAKE *Thamnophis c. gigas* (Thcogi)	Occupies the Great Valley of California between the Coast Ranges and the Sierra Nevadas south of the San Francisco Bay area. Habitat destruction from agricultural land use and the manipulation of the aquatic habitat is threatening this species. It is protected by state law.	3	30 33 48	CA	Threatened (CA)
*SANTA CRUZ GARTER SNAKE *Thamnophis c. atratus* (Thcoat)	Found along the coast south of the San Francisco Bay area to the vicinity of Salinas.	3	6 30 33 47 48	CA(W)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*TWO-STRIPED GARTER SNAKE *Thamnophis c. hammondi* (Thcoha)	Restricted to the coastal region of California from the vicinity of Santa Marta. Active at dusk. Habitat destruction from urbanization, road building, and the manipulation of the aquatic habitat is threatening this subspecies. It is also commercially exploited, but protected by state law.	3	30 33 35 36	CA	Threatened (CA)
NORTHWESTERN GARTER SNAKE *Thamnophis ordinoides* (Thor)	Inhabits the dense undercover which borders the humid forests of the Puget Sound lowlands. It is usually in adjacent meadows and clearings where there is abundant low-growing vegetation. It may take cover in the dense thickets of blackberry brambles or bracken. Its diet includes slugs, earthworms, salamanders, and Pacific tree frogs.	1 2	1 2 25 26 28	CA(NW) OR(W) WA(W)	
BLACK-NECKED GARTER SNAKE *Thamnophis cyrtopsis* (Thcy)	This snake seems to prefer mountainous and hilly areas and is uncommon far from water, except perhaps during very wet weather. It may occur along the banks of mountain canyon streams, or along permanent or intermittent streams in desert, grassland, mesquite flats, chaparral, or pine-fir forests. Its diet includes frogs, toads, and tadpoles. It is live-bearing. There are two subspecies in the United States, one in the West:				
*WESTERN BLACK-NECKED GARTER SNAKE *Thamnophis c. cyrtopsis* (Thcycy)		7 11 12 13	18 19 21 23 27 31 32 59	AZ(E) CO(S, peripheral) NM UT(SE)	
MEXICAN GARTER SNAKE *Thamnophis eques* (Theq)	In southeastern Arizona, it occurs in Rillito Wash near Tucson, San Pedro Valley, and the vicinity of Douglas. It inhabits valleys and bottomlands in pine-oak forest, mesquite grassland, and desert--the lowlands. It is not in mountain canyon stream habitats. It is live-bearing. The diet consists of frogs and probably fish. There is one western subspecies:				
*MEXICAN GARTER SNAKE *Thamnophis e. megalops* (Theqme)		7	19 27 31 32 42 58	AZ(C&SE) NM(W, peripheral)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
CHECKERED GARTER SNAKE *Thamnophis marcianus* (Thma)	Found in the grasslands and desert, frequenting ponds, springs, streams, rivers, and irrigated lands. It ranges sparingly into the pine-oak association. Rodent burrows are often used for shelter. In the desert, summer feeding and general activity are primarily at night, particularly in situations distant from water. It is live-bearing, with the young born in June and July. Its diet includes fish, toads, frogs, tadpoles, lizards, and invertebrates. There are two subspecies in the United States, one in the West:				
*WESTERN CHECKERED GARTER SNAKE *Thamnophis m. nigrolateris* (Thmani)		7 13	31 32 42 43 44 58 59	AZ(S) CA(SE) NM(S&E)	
PLAINS GARTER SNAKE *Thamnophis radix* (Thra)	Primarily found in prairie lands with prairie sloughs, marshes, wet meadows, bogs, swamps, ponds, lakes, streams, and rivers. It also ranges into the pinyon-juniper association. It is live-bearing. Its diet includes fish, frogs, toads, tadpoles, earthworms, and insects. There is one western subspecies:				
*WESTERN PLAINS GARTER SNAKE *Thamnophis r. haydeni* (Thraha)		13 14 15 16	16 17 23 63 64 65 66 70 98	CO(E) MT(E) NM(E) WY(E)	
WESTERN RIBBON SNAKE *Thamnophis proximus* (Thpr)	Highly adaptable, and found in many habitats from temperate woodland and grassland to the tropics. It is usually found near water, in the vegetation bordering streams, lakes, ponds, sloughs, and marshes. It can both swim and climb well. It is live-bearing, with the young being born in July and August. The diet of this snake includes frogs, fish, earthworms, and insects. There are four subspecies in the United States, one in the West:				
*ORANGE-LINED RIBBON SNAKE (Pecos Ribbon Snake) *Thamnophis p. diabolicus* (Thprdi)	Protected by New Mexico state law.	13	23 31 59 65	CO(SE, peripheral) NM(NE & S, peripheral)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Genus TROPIDOCLONION - Lined Snakes					
LINED SNAKE *Tropidoclonion lineatum* (Trli)	Found in open prairies and woods, floodplains, and city lots. It is quite secretive, hiding under rocks or logs during the day. It may be found on open ground during the night, usually in wet weather. Its diet consists primarily of earthworms - also sowbugs and insects. It is live-bearing, with the young born in August. There are four subspecies in the United States, two in the West:				
*NORTHERN LINED SNAKE *Tropidoclonion l. lineatum* (Trlili)	Found in the Boulder-Denver region and southeastern CO.	13	65	CO(E, peripheral)	
*NEW MEXICAN LINED SNAKE *Tropidoclonian l. mertensi* (Trlime)		13	23 65	NM(NE, peripheral)	
Genus SONORA - Ground Snakes					
WESTERN GROUND SNAKE *Sonora semiannulata* (Sose)	Found in arid and semiarid regions, usually where there is sand and some subsurface moisture. It frequents river bottoms, sandy plains and mesas, rocky hillsides, desert flats, and sand hummocks. The associated vegetation includes sagebrush, creosote bush, mesquite, arrowweed, and willow. It is nocturnal and secretive, hiding in rodent burrows, or under rocks. Its diet includes spiders, centipedes, crickets, grasshoppers, and insect larvae. There are five subspecies in the United States:				
*SANTA RITA GROUND SNAKE *Sonora s. semiannulata* (Sosese)	Restricted to the Santa Rita Mountains.	7	27 42 43	AZ(extreme S)	
*TRANS-PECOS GROUND SNAKE *Sonora s. blanchardi* (Sosebl)		7	58	NM(extreme S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*GRAND CANYON GROUND SNAKE *Sonora s. gloydi* (Sosegl)	Found in the Grand Canyon region.	7 12	23 38 41 58	AZ(NW) UT(SW)	Threatened (UT) No protection
*GREAT BASIN GROUND SNAKE *Sonora s. isozona* (Soseis)	Found in the Great Basin	5 6 7	38 40 41 55	AZ(W) CA(E) NV ID(SW, peripheral) OR(SE)	
*VERMILION-LINED GROUND SNAKE *Sonora s. linearis* (Soseli)	Occurs in southeast California east of the San Bernardino Mountains.	7	42 43	CA(SE)	
GROUND SNAKE *Sonora episcopa* (Soep)	A secretive prairie species, taken mainly in dry situations, where there are rocks and loose sandy soil. It is also in open arid woodland. It is frequently found on hillsides, especially sunny southern hill slopes. It is usually found under stones, boards, and other objects. Some vegetative associations are (w. Texas) catclaw-gramma, cedar-savannah, cedar-ocotillo, persimmon-shin oak, cedar-oak, mesquite-creosote, and walnut-desert willow. Its diet includes spiders, centipedes, scorpions, and insects. There are two subspecies, one in the West:				
*GREAT PLAINS GROUND SNAKE *Sonora e. episcopa* (Soepep)		13	31 59 60 65	CO(SE) NM(E)	
Genus CHIONACTIS - Shovel-nosed Ground Snakes					
WESTERN SHOVEL-NOSED SNAKE *Chionactis occipitalis* (Choc)	Restricted to the desert, being most abundant in flat and open, sparsely vegetated areas with fine wind-blown sand and dunes. It frequents washes, dunes, sandy flats, and alluvium. The associated sparse vegetation includes creosote bush, desert grasses, cactus, and mesquite. The snake is nocturnal and a rapid burrower in the loose sand. Its diet includes insects, spiders, scorpions, centipedes, and buried chrysalids of moths. There are four subspecies in the United States:				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*MOJAVE SHOVEL-NOSED SNAKE *Chionactis o. occipitalis* (Chococ)		7	41 42 43	AZ(W) CA(SE) NV(S)	
*COLORADO DESERT SHOVEL-NOSED SNAKE *Chionactis o. annulata* (Chocan)		7	42 43 46	AZ(SW) CA(S)	
*NEVADA SHOVEL-NOSED SNAKE *Chionactis o. talpina* (Chocta)		6 7	40 41	CA(E) NV(W)	
*TUCSON SHOVEL-NOSED SNAKE *Chionactis o. klauberi* (Chockl)		7	42	AZ(SC)	
SONORA SHOVEL-NOSED SNAKE *Chionactis palarostris* (Chpa)	In the United States, known only from the Organ Pipe Cactus National Monument, in the Sonoran Desert in southwestern Pima County, Arizona. It is adapted to digging in sand and sandy-gravelly soils in the paloverde-sahuaro association, where it frequents bajadas and hilly terrain as well. The associated vegetation includes cactus, creosote bush and mesquite: There is one subspecies in the United States:				
*ORGAN PIPE SHOVEL-NOSED SNAKE *Chionactis p. organica* (Chpaor)		7	27 42 43	AZ(S)	
Genus CHILOMENISCUS - Banded Burrowing Snakes					
BANDED SAND SNAKE *Chilomeniscus cinctus* (Chci)	Found in the extreme southern part of Arizona in the Sonora Desert eastward to the San Pedro River Valley and northeastward to the vicinity of Superior. It burrows in sandy and sandy-gravelly soils, occurring in the open sandy desert (creosote bush association) and in the sandy-gravelly washes and arroyos in otherwise rocky upland terrain (paloverde-sahuaro association). It rarely comes above the surface, except at night. Its diet consists of centipedes, sand-burrowing cockroaches, insects, and probably ant pupae.	7	42 43	AZ(S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Genus GYALOPION - Hook-nosed Snakes					
WESTERN HOOK-NOSED SNAKE *Gyalopion cana* (Gyca)	Known from a few localities in the desert and desert-grassland transition (Cochise County, Arizona). It may be found in semiarid environments of grass, pinyon-juniper, and other scrubby plant growth. It has been found in rocky areas, alluvial deposits, and on grassy desert flats. It is nocturnal and a burrower, and takes refuge in rodent burrows. It apparently feeds primarily on spiders.	7 13	23 40 44 58 59	AZ(SE) NM(S)	Threatened (NM) No protection
SONORA HOOK-NOSED SNAKE *Gyalopion quadrangularis* (Gyqu)	Found in the Patagonia-Pajarito Mountains area in Santa Cruz County, Arizona. It occurs in rolling foothills of mesquite grassland and oak-grassland. It is evidently strictly nocturnal and abroad on the surface primarily during and after rains. There is one subspecies in the United States:	7	27 31	AZ(S, peripheral)	Rare
Genus TANTILLA - Black-headed Snakes					
WESTERN BLACK-HEADED SNAKE *Tantilla planiceps* (Tapl)	This snake has been found along rocky edges of washes, arroyos, and streams in desert valleys, and on rocky hillsides in the desert-grassland and lower oak woodland. It is secretive and rarely seen active on the surface. It may be found under rocks, rock rubble, dead agaves, yuccas, sotol, and other objects, especially when the surface soil is damp. It is most active in March and April after the winter rains, and in July and August after summer rains. There are five subspecies in the United States:				
*MEXICAN BLACK-HEADED SNAKE *Tantilla p. atriceps* (Taplat)		7 13	31 32 44 58 59	AZ(S) NM(S)	
*CHIHUAHUA BLACK-HEADED SNAKE *Tantilla p. yaquia* (Taplya)	A Mexican snake found only in the vicinity of Bisbee, Arizona.	7	31 58	AZ(SE)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*UTAH BLACK-HEADED SNAKE *Tantilla p. utahensis* (Taplut)	Protected by law in Colorado.	7 12	23 39	AZ(NW) CA(S) CO(W) NV(S) UT(S)	
*DESERT BLACK-HEADED SNAKE *Tantilla p. transmontana* (Tapltr)	Known from San Diego and Riverside Counties	3	42 43	CA(S)	
*CALIFORNIA BLACK-HEADED SNAKE *Tantilla p. eiseni* (Taplei)	Ranges southward from Fresno County, California.	3	30 33 35 36	CA(W)	
PLAINS BLACK-HEADED SNAKE *Tantilla nigriceps* (Tani)	Inhabits shortgrass prairie, brushland, and woodland, where it is typically found under rocks, boards, and other objects. More active in March and April after winter rains and in July and August after summer rains. Its diet consists of insects, earthworms, and spiders. There are two subspecies in the United States, one in the West:				
*PLAINS BLACK-HEADED SNAKE *Tantilla n. nigriceps* (Tanini)	Protected by law in Colorado	7 13 14	23 58 59 65 70 71	AZ(SE) CO(E) NM	Threatened (CO)
HUACHUCA BLACK-HEADED SNAKE *Tantilla wilcoxi* (Tawi)	Restricted to the Patagonia and Huachuca Mountain area, Arizona, in woodland and grassland associations. It may be found under rocks, logs, and dead plants such as yucca, agave, and sotol in shaded rocky canyons and on relatively open and sunny rocky slopes in the desert-grassland and evergreen woodland. There is one subspecies:				
*HUACHUCA BLACK-HEADED SNAKE *Tantilla w. wilcoxi* (Tawiwi)		7	31 58	AZ(extreme S)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Genus OXYBELIS					
VINE SNAKE *Oxybelis aeneus* (Oxae)	Found in the United States only in the Pajarito Mountains, Santa Cruz County, Arizona. It is primarily an inhabitant of brush-covered hillsides and canyon streambeds grown to sycamore, oak, walnut, and wild grape. It is well camouflaged climber. It feeds on lizards, hunting in the morning or late afternoon. There is one subspecies in the country:				
*MEXICAN VINE SNAKE *Oxybelis aeneus auratus* (Oxaeau)		7	31 58	AZ(extreme SC)	
Genus TRIMORPHODON - Lyre Snakes					
OAXACA LYRE SNAKE *Trimorphodon biscutatus* (Trbi)	Found in desert, desert-grassland, evergreen woodland, and ponderosa pine forest. It typically inhabits rocky canyons and rocky hillsides, being rarely encountered in open, rockless, or treeless terrain. It is a good climber, ascending trees and entering rock crevices. Its diet includes small mammals and lizards.				
*BAJA CALIFORNIA LYRE SNAKE *Trimorphodon biscutatus lyrophanes* (Tribly)		7 12	19 31 32 41 42 43 58	AZ	
*CALIFORNIA LYRE SNAKE *Trimorphodon biscutatus vandenburghi* (Trbiva)		3	33 35 41 42	CA (S.W.)	
*CHIHUAHUA LYRE SNAKE *Trimorphodon biscutatus vilkinsoni* (Trbivi)	Similar to the Southwestern Lyre Snake.	7	58 59	NM(extreme S)	
Genus HYPSIGLENA - Night Snakes					
NIGHT SNAKE *Hypsiglena torquata* (Hyto)	Found in desert, prairie, chaparral, sagebrush flats, grassland, and woodland, both in rocky and sandy areas. The				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	associated vegetation includes joshua trees, mesquite, saguaro and oak. It is found under rocks, boards, dead branches and other objects. It is nocturnal. The diet includes frogs, lizards, and insects. This snake lays eggs. There are six subspecies in the country.				
*DESERT NIGHT SNAKE *Hypsiglena t. deserticola* (Hytode)		5 6 7	23 38 40 41 55	AZ(extremeNW) CA(SE) ID(SW) NW OR(E) UT(W) WA(S)	
*SAN DIEGO NIGHT SNAKE *Hypsiglena t. klauberi* (Hytokl)	Ranges from the region of San Luis Obispo Bay, southward.	3	33 35 36 48	CA	
*MESA VERDE NIGHT SNAKE *Hypsiglena t. loreala* (Hytolo		12	23 39 40	UT(E) CO(SW) NM(NW) AZ(NE)	
*CALIFORNIA NIGHT SNAKE *Hypsiglena t. nuchalata* (Hytonu)	Found on the slopes bordering the Great Valley, west of the Sierra Nevadas and east of the Coast Ranges.	3	30 48	CA	
*SPOTTED NIGHT SNAKE *Hypsiglena t. ochrorhyncha* (Hytooc)		7 12	23 27 38 42 43 53 58	AZ NM(W) UT(peripheral)	
*TEXAS NIGHT SNAKE *Hypsiglena t. texana* (Hytote)		7 13	23 31 53 58 59 65 71	CO(SE, peripheral) NM	
Family ELAPIDAE - Coral Snakes					
Genus MICRUROIDES - Arizona Coral Snakes					
WESTERN CORAL SNAKE *Micruroides euryxanthus* (Mieu)	Found south of the Mogollon Rim, in thorn scrub, brushland, lower woodland, grassland, and farmland. It is most abundant in the rocky Arizona upland desert where there is a wide variety of closely adjacent soil types from loose sand to rock and rock rubble. It spends much of its time underground and perhaps in crevices. It is primarily nocturnal, but may emerge on overcast days. Its venom is highly dangerous. The diet includes other small snakes, lizards, and tantillas.				
*WESTERN CORAL SNAKE *Micruroides e. euryxanthus* (Mieueu)		7	31 32 42 58	AZ (S&C) NM(SW peripheral)	Protected NM State Law

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
Family VIPERIDAE - Vipers					
Subfamily CROTALINAE - Pit Vipers					
Genus SISTRURUS - Massasaugas					
MASSASAUGA *Sistrurus catenatus* (Sica)	In the West it is found in desert-grassland, particularly in low areas of rank growth. The associated vegetation includes mesquite, juniper, grassland, and yucca. It seeks shelter in rodent burrows and in rock outcrops. It feeds on mice and frogs. There are three subspecies in the country, one in the West:				
*DESERT MASSASAUGA *Sistrurus c. edwardsi* (Sicaed)	Habitat destruction from agricultural land use and commercial exploitation are affecting the snake's survival. There is no protection.	7 13	23 31 58 65 70 71	AZ(SE, peripheral) CO(SE) NM(SC)	
Genus CROTALUS - Rattlesnakes					
WESTERN DIAMONDBACK RATTLESNAKE *Crotalus atrox* (Crat)	Widely distributed in the desert, grassland, and lower woodland, frequenting a variety of habitats: rock outcrops, rocky canyons, riverbeds, boulder fields, limestone rocks, dense cactus and thorny thickets, plains and slopes, mesquite barrens, and semiarid and arid areas. It occupies rodent burrows, woodrat nests and holes in arroyo banks. It is perhaps the most dangerous snake in the country. Its diet consists largely of rodents, and some birds. It is typically crepuscular and nocturnal, remaining under cover out of the sun.	7 13	23 31 32 42 43 53 58 59 65	AZ(S) CA(SE) CO NM NV(extreme S)	
RED DIAMOND RATTLESNAKE *Crotalus ruber* (Crru)	In the United States this rattler is restricted to southwestern California, from the coast to the desert foothills west of the San Bernardino Mountains. It inhabits chaparral-covered and rocky hillsides, boulders, and in areas of mesquite and cactus on the rocky alluvial fans on the lower desert slopes. It is live-bearing. Its diet consists of primarily small mammals and includes lizards, birds, and other snakes.	3	33 35	CA(SW)	

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
ROCK RATTLESNAKE *Crotalus lepidus* (Crle)	Found in the Sierra Madrean mountain ranges: Santa Rita, Dragoon, Huachuca, and Chiricahua mountains. It is a mid-elevation rock dweller primarily in rocky areas in the evergreen woodland (encinal and Mexican pine-oak), but ranges through the lower woodlands in rock slides on south-facing slopes, into rocky areas on the upper edge of the desert-grassland. It is often found in the vicinity of permanet or intermittent streams. The snake is live-bearing. The diet includes lizards, small frogs, and mice. There are two western subspecies:				
*MOTTLED ROCK RATTLESNAKE *Crotalus l. lepidus* (Crlele)	Found in the Guadalupe Mountains, New Mexico.	7	31 59	NM(extreme SE)	
*BANDED ROCK RATTLESNAKE *Crotalus l. klauberi* (Crlekl)	Found in the Santa Rita, Dragoon, Huachuca, and Chiricahua Mountains, Arizona. Commercial exploitation is endangering this subspecies. It is protected under state law in New Mexico and Arizona.	7	31 58	AZ(SE) NM(SC & SW)	ENDANGERED (NM) Threatened (AZ)
SPECKLED RATTLESNAKE *Crotalus mitchelli* (Crmi)	Found in rocky country in light brush, desert foothills, chaparral, canyons, buttes, pinyon-juniper woodland, and occasionally sandy areas. It is live-bearing. Its diet consists of small mammals, lizards, and small birds. There are two subspecies in the United States:				
*SOUTHWESTERN SPECKLED RATTLESNAKE *Crotalus m. pyrrhus* (Crmipy)		7	23 33 41 42 43	AZ(W) CA(S) NV(extreme S) UT(extreme SW)	ENDANGERED (UT) No protection
*PANAMINT RATTLESNAKE *Crotalus m. stephensi* (Crmist)		7	23 40 41	CA NV(S)	
SIDEWINDER *Crotalus cerastes* (Crce)	Found in the desert on terrain varying from barren fine-sand dunes, bare hardpan and rocky-gravelly desert pavement, across playas and hummocks to rocky outwash slopes. The associated vegetation includes creosote bush, mesquite, and paloverde-sahuaro. The snake is chiefly nocturnal, remaining in a shallow pit at the base of a bush during the day. It is				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
	live-bearing, and feeds on lizards and mice. There are three western subspecies:				
*MOJAVE DESERT SIDEWINDER *Crotalus c. cerastes* (Crcece)		7	40 41	AZ(W) CA(SE) NV(S) UT(extreme SW)	
*SONORA SIDEWINDER *Crotalus c. cercobombus* (Crcece)		7	27 42 43	AZ(SC)	
*COLORADO DESERT SIDEWINDER *Crotalus c. laterorepens* (Crcela)		7	27 42 43	AZ(SW) CA(extreme SE)	
BLACK-TAILED RATTLESNAKE *Crotalus molossus* (Crmo)	This rattler avoids barren desert. It is found on forested mountains and plateaus, and sparingly on lower desert ranges. It inhabits rockslides, outcrops, the vicinity of cliffs, rocky stream courses, and canyon boulders. The associated vegetation includes paloverde, cactus, thornbush, chaparral-woodland, catclaw-cedar, catclaw-gramma, oak, and pine-fir. The snake is active both day and night, especially following warm rains. It is live-bearing. There is one subspecies:				
*NORTHERN BLACK-TAILED RATTLESNAKE *Crotalus m. molossus* (Crmomo)		7 12	18 19 23 31 32 42 43 58	AZ(S & C) NM(S & C)	
TIGER RATTLESNAKE *Crotalus tigris* (Crti)	Strictly a rock dweller, inhabiting rocky canyons and foothills and bajadas of desert mountain ranges. The associated vegetation includes cactus, mesquite, creosote bush, and oak. It is active both day and night, often after warm rains. It is live-bearing.	7	19 27 32 42 43	AZ(SC)	
WESTERN RATTLESNAKE *Crotalus viridis* (Crvi)	Highly variable habitats, from brush-covered coastal sand dunes to timberline and from midwestern prairies to mountain forests of the Pacific coast. It avoids the desert, inhabiting canyonland (in rocks, crevices, and beach drift) through grassland and evergreen woodland (in rodent burrows, rock outcrops, and woodrat nests) into coniferous forest (under logs, rocks, etc.). It is live-bearing. There are eight subspecies in the country:				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*PRAIRIE RATTLESNAKE *Crotalus v. viridis* (Crvivi)	A prairie rattler. Commerical exploitation has endangered this species.	7-13 15 16	12 15 18 23 44 53 58 59 64 65 66 70 71	CO(E) ID(E) MT NM WY	ENDANGERED (UT)
*MIDGET FADED RATTLESNAKE *Crotalus v. concolor* (Crvico)		9 10 11 12	18 21 23 55	CO(W) UT(E) WY(SW)	
*HOPI RATTLESNAKE *Crotalus v. nuntius* (Crvinu)		12	23 53	AZ(NE) CO(SW), peripheral) NM(NW) UT(SC)	
*GRAND CANYON RATTELSNAKE RATTLESNAKE *Crotalus v. abtssus* (Crviab)	Found only in the Grand Canyon	12	23 37 55	AZ(NW) CA(NW) ID(NW) ID(S) NV OR(SE) UT(W)	
*GREAT BASIN RATTLESNAKE *Crotalus v. lutosus* (Crvilu)	Found in the Great Basin			CA(NW OR(SE) NV ID(S) UT(W) AZ(NW)	
*ARIZONA BLACK RATTLESNAKE *Crotalus v. cereberus* (Crvice)	Protected by New Mexico State law	7 12	19 23 30 31 58	AZ(C) NM(W)	Rare
*SOUTHERN PACIFIC RATTLESNAKE *Crotalus v. helleri* Crvihe)		3	5 30 33 48	CA(SW)	
*NORTHERN PACIFIC RATTLESNAKE *Crotalus v. oreganus* (Crvior)		3 4 5 8 12	1-6 11 14 29 30 48 55	CA ID(W) OR WA(E)	
MOHAVE RATTLESNAKE *Crotalus scutulatus* (Crsc)	Found primarily on the high desert and lower mountain slopes. It may occur in barren desert, grassland, or brushland, most commonly associated with creosote bush and mesquite. It is primarily in open and non-rocky, flat or undulating terrain, being less common on bajadas, fans, foothills, and hillsides where soils are rocky and vegetation dense. It takes refuse in rodent burrows, rat nests, under boards, and trash. There is one subspecies in the country.				

SPECIES	HABITAT, BIOLOGICAL DATA	PHYSIOGRAPHIC REGIONS	ASSOCIATION NUMBERS	STATES	COMMENTS
*MOJAVE RATTLESNAKE *Crotalus s. scutulatus* (Crscsc)		7	41 42 43 58	AZ CA(SE) NM(extreme SW) NV(S) UT(extreme SW)	ENDANGERED (UT) No protection
TWIN-SPOTTED RATTLESNAKE *Crotalus pricei* (Crpr)	Found in Santa Riata, Huachuca, Dos Cabezas, Chiricahua, and Pinaleno (Graham) mountains. The associated vegetation includes spruce-fir, white fir-Douglas fir, ponderosa pine, and Mexican pine-oak. It primarily occupies rocky areas well-illuminated by the sun. The snake is live-bearing. It feeds on small mammals and lizards. It may be active day or night. There is one subspecies:				Protected by AZ state law
*TWIN-SPOTTED RATTLESNAKE *Crotalus p. pricei* (Crprpr)		7	19 31	AZ(SE)	
RIDGE-NOSED RATTLESNAKE *Crotalus willardi* (Crwi)	Found in the Santa Rita and Huachuca Mountains. It is associated with pine-fir, pine-oak, and canyon bottoms with alder, box elder, maple, oak, and other broadleaf deciduous trees. It prefers well-lighted, rocky areas. It may be active day or night. It is live-bearing and feeds on mice, lizards, and small snakes. There are two subspecies:				Protected by AZ state law
*ARIZONA RIDGE-NOSED RATTLESNAKE *Crotalus w. willardi* (Crwiwi)	Commercially exploited, but protected by state law.	7	19 31	AZ(SE)	Threatened (AZ)
*CHIAUAHUA RIDGE-NOSED RATTLESNAKE *Crotalus w. silus* (Crwisi)	Known only from the Animas Mountains. Commercially exploited	7	31	NM(SW)	ENDANGERED (NM)

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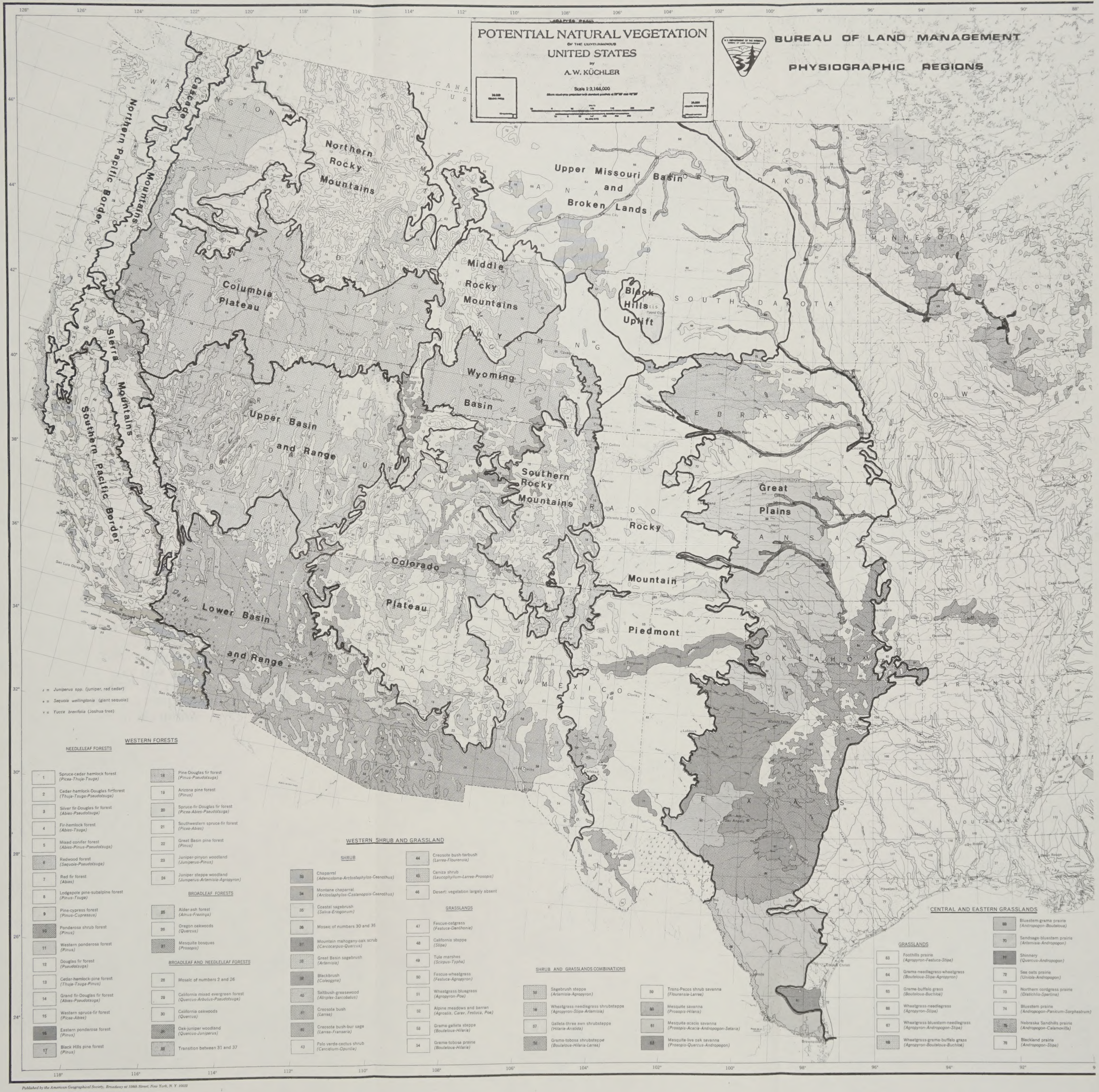
POTENTIAL NATURAL VEGETATION
OF THE CONTERMINOUS
UNITED STATES
by
A.W. KÜCHLER
Scale 1:3,168,000
BUREAU OF LAND MANAGEMENT
PHYSIOGRAPHIC REGIONS
Northern Pacific Border
Cascade Mountains
Northern Rocky Mountains
Upper Missouri Basin and Broken Lands
Middle Rocky Mountains
Black Hills Uplift
Columbia Plateau
Sierra Mountains
Wyoming Basin
Upper Basin and Range
Southern Rocky Mountains
Southern Pacific Border
Great Plains
Colorado Plateau
Rocky Mountain Piedmont
Lower Basin and Range
WASHINGTON
OREGON
IDAHO
MONTANA
WYOMING
NEVADA
UTAH
COLORADO
ARIZONA
NEW MEXICO
TEXAS
OKLAHOMA
KANSAS
NEBRASKA
SOUTH DAKOTA
DAKOTA
MINNESOTA
WISCONSIN
IOWA
MISSOURI
ARKANSAS
LOUISIANA
CANADA
US
J = Juniperus spp. (juniper, red cedar)
● = Sequoia wellingtonia (giant sequoia)
Y = Yucca brevifolia (Joshua tree)
WESTERN FORESTS
NEEDLELEAF FORESTS
1 Spruce-cedar hemlock forest (Picea-Thuja-Tsuga)
2 Cedar-hemlock-Douglas fir forest (Thuja-Tsuga-Pseudotsuga)
3 Silver fir-Douglas fir forest (Abies-Pseudotsuga)
4 Fir-hemlock forest (Abies-Tsuga)
5 Mixed conifer forest (Abies-Pinus-Pseudotsuga)
6 Redwood forest (Sequoia-Pseudotsuga)
7 Red fir forest (Abies)
8 Lodgepole pine-subalpine forest (Pinus-Tsuga)
9 Pine-cypress forest (Pinus-Cupressus)
10 Ponderosa shrub forest (Pinus)
11 Western ponderosa forest (Pinus)
12 Douglas fir forest (Pseudotsuga)
13 Cedar-hemlock-pine forest (Thuja-Tsuga-Pinus)
14 Grand fir-Douglas fir forest (Abies-Pseudotsuga)
15 Western spruce-fir forest (Picea-Abies)
16 Eastern ponderosa forest (Pinus)
17 Black Hills pine forest (Pinus)
18 Pine-Douglas fir forest (Pinus-Pseudotsuga)
19 Arizona pine forest (Pinus)
20 Spruce-fir-Douglas fir forest (Picea-Abies-Pseudotsuga)
21 Southwestern spruce-fir forest (Picea-Abies)
22 Great Basin pine forest (Pinus)
23 Juniper-pinyon woodland (Juniperus-Pinus)
24 Juniper steppe woodland (Juniperus-Artemisia-Agropyron)
BROADLEAF FORESTS
25 Alder-ash forest (Alnus-Fraxinus)
26 Oregon oakwoods (Quercus)
27 Mesquite bosques (Prosopis)
BROADLEAF AND NEEDLELEAF FORESTS
28 Mosaic of numbers 2 and 26
29 California mixed evergreen forest (Quercus-Arbutus-Pseudotsuga)
30 California oakwoods (Quercus)
31 Oak-juniper woodland (Quercus-Juniperus)
32 Transition between 31 and 37
WESTERN SHRUB AND GRASSLAND
SHRUB
33 Chaparral (Adenostoma-Arctostaphylos-Ceanothus)
34 Montane chaparral (Arctostaphylos-Castanopsis-Ceanothus)
35 Coastal sagebrush (Salvia-Eriogonum)
36 Mosaic of numbers 30 and 35
37 Mountain mahogany-oak scrub (Cercocarpus-Quercus)
38 Great Basin sagebrush (Artemisia)
39 Blackbrush (Coleogyne)
40 Saltbush-greasewood (Atriplex-Sarcobatus)
41 Creosote bush (Larrea)
42 Creosote bush-bur sage (Larrea-Franseria)
43 Palo verde-cactus shrub (Cercidium-Opuntia)
44 Creosote bush-tarbush (Larrea-Flourensia)
45 Ceniza shrub (Leucophyllum-Larrea-Prosopis)
46 Desert: vegetation largely absent
GRASSLANDS
47 Fescue-oatgrass (Festuca-Danthonia)
48 California steppe (Stipa)
49 Tule marshes (Scirpus-Typha)
50 Fescue-wheatgrass (Festuca-Agropyron)
51 Wheatgrass-bluegrass (Agropyron-Poa)
52 Alpine meadows and barren (Agrostis, Carex, Festuca, Poa)
53 Grama-galleta steppe (Bouteloua-Hilaria)
54 Grama-tobosa prairie (Bouteloua-Hilaria)
SHRUB AND GRASSLANDS COMBINATIONS
55 Sagebrush steppe (Artemisia-Agropyron)
56 Wheatgrass-needlegrass shrubsteppe (Agropyron-Stipa-Artemisia)
57 Galleta-three awn shrubsteppe (Hilaria-Aristida)
58 Grama-tobosa shrubsteppe (Bouteloua-Hilaria-Larrea)
59 Trans-Pecos shrub savanna (Flourensia-Larrea)
60 Mesquite savanna (Prosopis-Hilaria)
61 Mesquite-acacia savanna (Prosopis-Acacia-Andropogon-Setaria)
62 Mesquite-live oak savanna (Prosopis-Quercus-Andropogon)
CENTRAL AND EASTERN GRASSLANDS
GRASSLANDS
63 Foothills prairie (Agropyron-Festuca-Stipa)
64 Grama-needlegrass-wheatgrass (Bouteloua-Stipa-Agropyron)
65 Grama-buffalo grass (Bouteloua-Buchloe)
66 Wheatgrass-needlegrass (Agropyron-Stipa)
67 Wheatgrass-bluestem-needlegrass (Agropyron-Andropogon-Stipa)
68 Wheatgrass-grama-buffalo grass (Agropyron-Bouteloua-Buchloe)
69 Bluestem-grama prairie (Andropogon-Bouteloua)
70 Sandsage-bluestem prairie (Artemisia-Andropogon)
71 Shinnery (Quercus-Andropogon)
72 Sea oats prairie (Uniola-Andropogon)
73 Northern cordgrass prairie (Distichlis-Spartina)
74 Bluestem prairie (Andropogon-Panicum-Sorghastrum)
75 Nebraska Sandhills prairie (Andropogon-Calamovilfa)
76 Blackland prairie (Andropogon-Stipa)

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